

A PUBLICATION OF THE DEFENSE ACQUISITION UNIVERSITY

Training and Educating the Navy and Marine Corps **Acquisition Workforce**

Acquisition Career Management Director Chris Stelloh-Garner talks to Defense AT&L

ALSO

The Case for Transatlantic Cooperation— A U.S. Perspective

The Challenge of Producing Quality Materiel in an **Environment of Reform**

The Importance of Culture and Bargaining in **International Negotiations**

Through the Looking Glass

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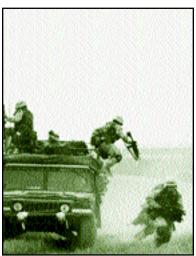
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10,000 uniforms in
theater and at training
centers, the Army will
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uniform with 20
improvements designed for better
camouflage, comfort,
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Acting Under Secretary of Defense (Acquisition, Technology and Logistics) Michael Wynne

Director, Defense Procurement and Acquisition Policy Deidre Lee

> DAU President Frank J. Anderson Jr.

DAU Vice President Dr. James McMichael

DAU Commandant Col. Mary Kringer, USAF

Director, DAU Operations Support Group Col. Ronald J. Hayne, USA

Director, DAU Visual Arts and Press Eduard Boyd

Defense AT&L Editorial Staff

Editor-in-Chief	Collie Johnson
Managing Editor	Judith Greig
Contributing Editor	Christina Cavoli
Chief, Layout and Design_	Paula Croisetiere
Administrative Support	Rosemary Kendricks

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Defense AT&L interviews

Chris Stelloh-Garner

Director, Acquisition Career Management, Department of the Navy

s director of acquisition career management (DACM), Chris Stelloh-Garner is responsible to the assistant secretary of the Navy (research, development and acquisition) for the development, implementation and oversight of the Department of the Navy Acquisition Workforce Program (AWP) and for administering centralized funding for training and education required by acquisition workforce members.

Defense AT&L interviewed Stelloh-Garner in June to learn—among other things—how the DoN is stepping up to the challenges of the Defense Acquisition Workforce Improvement Act (DAWIA) and meeting the rapid deployment training requirements presented by Operation Enduring Freedom and Operation Iraqi Freedom.



The DoN acquisition workforce currently numbers around 40,000. Would you give us a little background: Where are the majority of these jobs located? How diverse are geographic assignments? What are the significant challenges in conducting training for this population?



Most of our acquisition workforce is here in the Washington and Norfolk areas, as well as Southern California, but we're also located across the United States and throughout Europe and Asia. The workforce includes both Navy and Marine Corps civilian and military members in a variety of career fields, such as program management, contracting, logistics, quality assurance, systems and facilities engineering, and business, cost estimating, financial management, and others. And it's not just active-duty military. We've included Naval reservists previously on a case-by-case basis. By the time this issue of *Defense AT&L* hits the streets, we'll have launched a new segment of our program that includes our Reserve members as well.

I like to refer to our workforce as acquisition warriors. These are the folks who are on the front line to provide capability and support to our warfighters. It's our job to make sure that we give them the right toolbox to provide this capability effectively and efficiently. They deserve that. Our warfighters need it. And the American taxpayers demand it.



I like to refer to our workforce as acquisition warriors. These are the folks who are on the front line to provide capability and support to our warfighters. It's our job to make sure that we give them the right toolbox to provide this capability effectively and efficiently.

You asked about the challenges in conducting training for our 40,000-plus acquisition workforce. The most pressing challenge is relevancy. Relevancy not only in terms of what our acquisition warriors need to know, but also in terms of what and how we offer it to them. We have experts on our Department of the Navy acquisition functional boards who work with the Defense Acquisition University to make sure we meet this challenge. Another challenge is timing—getting our workforce trained at the right time in their careers. We want their training interspersed with experience throughout their careers, not "front loaded."

Q

At a basic level, how are workforce members brought into the acquisition professional community (APC)?

A

GS-13s, Navy lieutenant commanders, and Marine majors are eligible to apply for APC membership. We have separate processes for civilians and each military service, but individuals initiate their APC membership request, regardless of their community. APC membership is required for our acquisition warriors once they reach GS-14, senior Navy commander, or Marine lieutenant colonel level, all of which are critical acquisition positions.

Q

"Register-Now!" (< https://www.atrrs.army.mil/chan-nels/registernow/rnswitch.asp >) is the DoN's Web site for acquisition training applications and career field certification. The site allows CL—continuous learning—points to be tracked online, as well providing a portal for obtaining CL points. Has this site proved successful?

A

R-Now! as we refer to it, is a smash hit! Initially, R-Now! was developed to interface with the system DAU used to register students. Before R-Now! we'd have file folders for each course offering spread out on a table. We then stuffed training request forms into each folder before manually entering registration info into the DAU registration system. We've come a long way since then.

R-Now! has become a sophisticated tool for us to use in managing many aspects of the Defense Acquisition Workforce Improvement Act (DAWIA). We use it to register DoN students in our continuous learning curriculum; for tracking and documenting CL points; for automated career field certification; for managing our robust tuition assistance program; and—brand-new to us—processing our acquisition professional community membership. We're also modifying the system to automate many aspects of our acquisition intern program: individualized development plan (IDP) development, performance appraisals, rotational assignments, education, and so forth. It's quite a powerful tool not only for us as managers but also for

our customers. What more can I say? Except give the commercial: R-Now! is available at http://www.registernow.cms.navy.mil>.



Acquisition workforce members are encouraged to develop an IDP to ensure they receive the necessary training and continual learning to enhance their performance and careers. How are such plans developed? Have they proved to be a reliable roadmap?



IDPs are an area where we need to do better. It's a real hit-or-miss thing. One person may have a supervisor who's really engaged, and the next may not. My personal experience with IDPs is very spotty. It worked as long as my supervisor was there and I was in the same position. We're a mobile workforce. Transformation is a continuous process. We need to be able to identify basic requirements to our acquisition warriors, along with specialized skills, knowledge, and abilities—certain competencies—that they need in their toolbox.

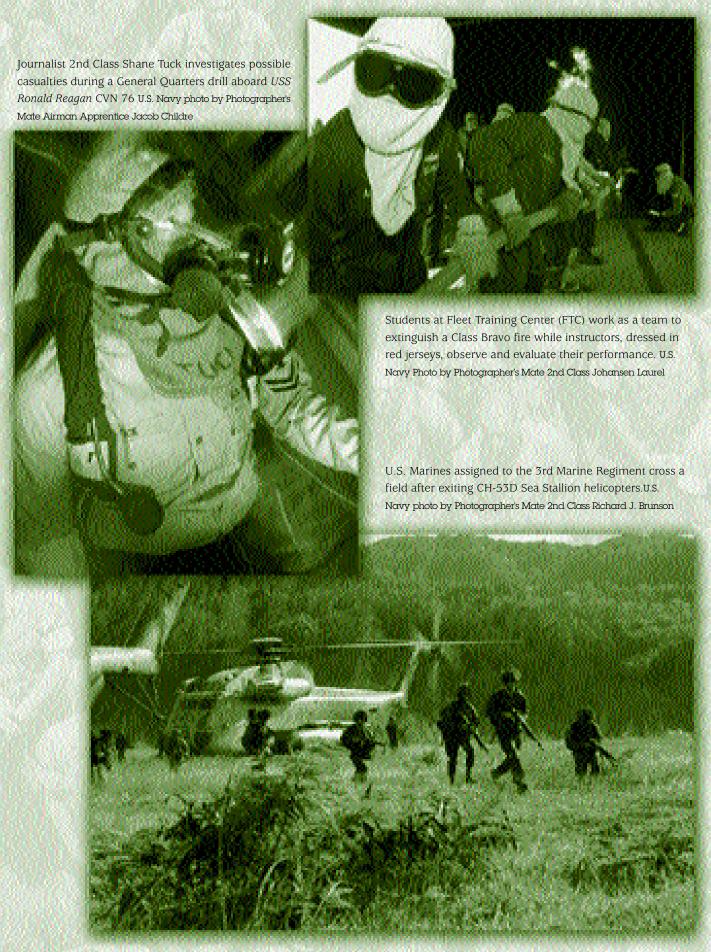
My vision is to adapt the so-called five-vectored model (5VM) that the uniformed Navy is using. Rear Adm. Kevin Moran, commander of the Naval Personnel Development Command in Norfolk, is spearheading this effort. We identify the competencies one needs for any given job at any given level in the areas of professional development, personal development, certifications and licenses, leadership, and performance. We then allow the individual to map his or her present levels against this. The gap is the IDP. And it's all automated! Many of our activities are engaged in varying levels of implementing 5VM. We've recently jumped in, and I'm hoping that we can build on their good efforts and can serve as a clearinghouse as well

Q

Are there new programs and initiatives ongoing in the area of educating the Navy/Marine Corps acquisition workforce?

A

We're constantly providing new programs to our acquisition warriors through our continuous learning program. An internal network of functional advisors, who serve as the chairs of the DoN Career Management Boards, keep me abreast of new initiatives. They identify new training requirements. Last year, we trained over 7,000 DoN students through our CL offerings. By the time this article goes to print, we'll be well on our way to adding several new courses, including LEAN Manufacturing, Six Sigma, Theory of Constraints, and Risk Management, all of which support Secretary [of the Navy for research, development and acquisition (ASN(RD&A)] Young's strategic vision for the naval acquisition community. Our CL curriculum dove-





Q-Now!* was developed to interface with the system DAU used to register students. We've come a long way since then. Q-Now! has become a sophisticated tool for us to use in managing many aspects of the Defense Acquisition Workforce Improvement Act (DAWIA).

*Register-Now!" < https://www.atrrs.army.mil/channels/registernow/rnswitch.asp > is the DoN's Web site for acquisition training applications and career field certification. tails with DAU offerings. We pride ourselves on keeping the CL program current with the latest acquisition strategies and processes.



Is DAU doing its job to get training to where the Navy acquisition workforce is located? What could DAU do better to support the educational needs of the Navy/Marine Corps acquisition workforce?



An enthusiastic yes to your first question! Is it perfect yet? No. DAU's Centers of Excellence, located near our large populations, have made a tremendous difference. And DAU is doing a great job accommodating our needs for on-site training. Rapid deployment training (RDT) is responding to emerging, urgent needs. My biggest challenge here is with Navy and Marine Corps activities that go directly to DAU with their needs for RDT. The result is that I don't get a chance to balance one activity's need against those needs of the rest of the workforce. But we're working with DAU to improve this situation.

From a requirements standpoint, we are ever-hopeful that DAU can increase throughput on high-demand classes. I believe this is achievable through cost savings in other areas. In FY04, we started using DAU's cost-effective location model to determine the best geographic match between a student's activity or duty station and the closest DAU campus. We need to think about including a student's home rather than activity, because we have a couple of fairly large commuting areas near DAU campuses. It turns out that some of our students live closer to one campus, but their duty station is closer to another. Despite this, we've had great success in cutting travel costs, and that translates into more students in classes.

Another area we're working on with DAU is how to reach students in Europe and the Pacific Rim more effectively. And our new reservists policy is impacting our needs as well. And what about our industry partners? These would be our contractor support team-mates, as well as our business partners. We need to make sure they have equitable access to the training and support that we think would allow them to be effective, efficient, and successful. We all want the same thing: to deliver capability and support to our warfighters.

As we implement DAWIA II, I believe our biggest challenge will be to accommodate cross-functional training. With ever-increasing pressure to make the acquisition workforce smaller and more efficient, we're demanding more of our acquisition warriors. They need to be more sophisticated about business. They need to be fluent in their primary career fields, but—more important—they must be fluent in other fields as well. They need to know how their pieces of the puzzle fit into the overall picture.

Christine Stelloh-Garner Director, Acquisition Career Management, Department of the Navy

hristine Stelloh-Garner joined the Naval Air Systems Command as a clerk-typist in 1974. As an upward mobility program trainee, she transitioned to program and management analysis, serving in positions involving various facets of program and facility management. Assignments included the joint-Service, tilt-rotor V-22 deputy for program ap-



praisal, and program manager for both Caribbean regional operations center upgrade and, later, the AH-1 night targeting system. Additionally, she served on the Command Federal Women's Program Committee.

Briefly leaving the Naval Air Systems Command in the mid-1980s, Stelloh-Garner remained active in naval aviation as a Booz-Allen & Hamilton consultant at the Naval Aviation Depot in Cherry Point, N.C., and as family readiness advisor for Marine Medium Lift Helicopter Squadron (HMM) 264. She also represented Advanced Technology, Inc., as a program consultant for naval aviation.

Stelloh-Garner joined the staff of the program executive officer (PEO) for tactical aircraft programs as a deputy for acquisition before being selected to the Senior Executive Service and assuming responsibility as deputy PEO for air anti-submarine warfare (ASW), assault and special mission programs in March 1998. As the deputy PEO, she provided oversight and insight for over 100 efforts with an annual appropriation of approximately S4 billion.

Selected as the Department of Navy's acquisition reform executive in May 2001, Stelloh-Garner was the facilitator and catalyst for innovation, streamlining, and change across all acquisition processes of the Navy and Marine Corps. She also served as the department's standardization executive. In November 2002, Stelloh-Garner became the director for program analysis and support in the newly formed office of the deputy assistant secretary of the Navy for acquisition management before assuming her current responsibilities.

As a collateral duty from early 2000 until January 2003, Stelloh-Garner served as the defense acquisition management functional advisor. In this capacity, she led a team of representatives across the Department of Defense in establishing requirements and providing recommendations to the under secretary of defense (acquisition, technology & logistics) concerning certification requirements and fulfillment of more than 10,000 Department of Defense acquisition workforce members in the program management career field.

A graduate of the Defense Systems Management College Program Manager's Course, Stelloh-Garner also holds a bachelor's degree in business administration from Mount Vernon College. An amateur garden designer, she and her husband, Robert Garner, enjoy their southern Maryland oasis.

They must be able to think globally and act locally. This will add a new level of complexity to DAU's offerings. It may even dictate modules like "cost estimating for PMs," "logistics for systems engineers," "contracts for logisticians"—you get the point. We need to make the training experience timely and relevant to the individual student in a time of transformation if we're to expect meaningful change in behavior.



As acquisition workforce members pursue cross training and career development to meet their continuous learning requirements, the demand for DAU courses continues to increase. Using technology in such ap*plications as distance learning (DL)* is a response to this increased demand; it increases the availability of training and offers students control over the location and timing of their training. Do you feel distance learning will ultimately replace the traditional classroom training experience? Will anything be gained or lost in this transition?

A

Distance learning is an efficient way to impart basic knowledge. But we want our acquisition workforce to be critical thinkers. I don't think you can get that from a diet of distance learning only. I believe true learning comes from discourse with others, and you need the classroom for that. That's why many of the basic classes are DL while the more senior ones are classroom or a combination of the two.

It takes a team to make a program successful. The DAU curriculum provides students a safe environment. They can learn how to become effective team members through casebased studies and meaningful discourse. With many of our courses, it's much like simulator training. We don't offer only DL and classroom lectures to our sailors and Marines who will pilot ships or tanks or aircraft, or operate communications

equipment: we use simulators to provide a real environment. We in the AT&L workforce should be no different. We entrust thousands, millions, billions of taxpayer dollars to our acquisition teams. Why should they not have the chance to train in a real environment?



There are some alternatives to mandatory acquisition training, such as equivalency exams or courses taken at a university or college. Have such options increased the ability of workforce members in remote locations to obtain the necessary training?

A

This is an area we've really taken advantage of, especially for the contracting community. DAU has granted equivalency to a number of colleges for their contracting curriculum. Some of our naval activities are taking advantage of that, and they have "lunch-time college" going on in several locations. This enables our contracting folks to get credit for DAU courses, while earning the 24 semester hours of credits required for the contracting workforce. This truly is a win-win situation!

Another area where we've maximized the equivalency option is for our Navy officer community. Many of our schools have some level of equivalency with DAU courses: Civil Engineer Corps Officer's School, Naval Test Pilot School, Supply Corps Officer's School, Naval Postgraduate School, Engineering Duty Officer School, to name a few. We also have robust programs in some hard-to-reach areas such as Groton, Conn., where DAU has granted equivalency to local training facilities, making it easier for our workforce to gain much-needed training. And the recent acquisition workforce policy memo that recognizes certification by PMI (Program Management Institute) and SOLE (International Society of Logistics, formerly the Society of Logistics Engineers) is a big first step in opening up opportunities for our industry partners to join us as members of the acquisition workforce. It takes a big whack at the "can't be one unless you already are one" syndrome that's plagued us for years. Our industry partners have a great deal of expertise, and we need to make it easier for them to get certified.

Q

What has been the result of hybrid courses (which contain a mixture of classroom and distance learning)?

A

Hybrid courses are a great way—very efficient—to convert multiple weeks of classroom instruction into a combination of distance learning and shorter-duration classroom training. The only problem we had with these hybrids was that our students couldn't sign up for the distance learning portion of the course until they were registered for the classroom portion. That created a backlog of students await-

ing the availability of the "total" hybrid course, and it meant that we were denying students the ability to gain knowledge when the capability to deliver it existed.

In our spring 2003 acquisition training reps' annual conference, our experts in the field shared this issue and told us they wanted to separate the linkage between the DL and classroom parts of hybrid courses. Dr. Bob Ainsley was DAU's rep at the meeting. Bob Ainsley carried that message back, and within a few months, DAU separated the parts. As a result, we've seen an enormous increase in the number of students completing the DL portions. We see many non-acquisition workforce members enrolled in these offerings in addition to our acquisition professionals working through modules in a career field other than their own. What does this tell me? That we're transforming professionals into a team. And that we're preparing them for discourse that accompanies critical thinking.

Q

Let's turn to deployment training. The deployment of our forces around the globe has a large impact on the DoN acquisition community. How is your organization responding to the increasing tempo?

A

Much of what we already have in place supports this—our program specifically geared toward Naval reservists, for instance. We've made sure that individuals being deployed to Iraq and Afghanistan for contingency contracting get the training they need beforehand. One of the reservist challenges is attending mandatory DAU courses during "drilling" periods. We're working with the Reserve community to develop a contracting "boot camp" that will provide critical skill sets needed when individuals deploy to contingency contracting billets. Sailors, Marines and civilians around the world can take advantage of distance learning. And, of course, we're continuing to automate key workforce program elements, such as the APC membership application and approval process, along with certification.

Q

On the transformation front, does the Integrated Learning Environment (ILE) touted as part of DoN transformation affect the training and education of the APC? Will it change the way current training is performed?

A

We've been discussing transformation throughout all of the previous Q&As. While DAU provides a foundational knowledge base, one of my goals is to make sure I can provide just-in-time training for Service-specific initiatives. We talked earlier about the DoN Career Management Board functional advisors. These advisors, along with the extensive network of acquisition training reps across our major claimants, are my eyes and ears in the workforce. They're on the front lines and are

the first to let us know what our acquisition warriors need to know.

One of the areas we've not discussed yet is DAWIA streamlining, or DAWIA II, the result of the FY04 National Defense Authorization Act (NDAA). By the time this article appears, DAWIA II will be almost in place. We've been actively involved in the steering and work groups with DP/AP, DAU, other Services, and functional advisor reps to take advantage of the flexibility that the law gives us. We've designed a program with centralized policies and procedures—OSD level—that's executed locally by the Services. I'm confident that these changes will help us focus on the right issues: a competent acquisition workforce, rather than checks in the boxes.

Another significant element is the Chief of Naval Operations Civilian Community Management effort. Marcia Tremaine is leading this charge (her code is "N11"). Much of the effort is building on the commandant of the Marine Corps' "civilian marines" training. There are around 20 or 21 communities, which are identified by civilian job series. Some have a loose match to our DAWIA communities, except we define ours functionally. Each civilian community has a flag or general officer or Senior Executive Service individual as its leader and an N11 manager to identify those skills and competencies required. I happen to be the leader for the program management community, and we're about to launch a survey to all of the GS-340s (the program manager job series) in the DoN to validate the effort that the PM IPT has accomplished. We'll also include pockets of people who are in other job series but who admittedly are performing PM functions. Our ultimate goal is to develop basic program management training, which then I, as director, acquisition career management, will augment with program manager training required for acquisition positions. Each of the civilian communities is at a bit of a different stage, but I view this as an opportunity for "corporate Navy" to provide basic training, with the acquisition community providing those specialized DAWIA competencies. This is not unlike our military communities today. And we all can take advantage of the 5VM, so I see this as an exciting challenge as our Navy and Marine Corps prepare to enter their 230th year of service.



That's a good lead-in to the next area we'd like to address: preparing for the future. For the third straight year, the DoN has reported the highest retention in history, yet there exists concern that there may be an insufficient number of professionals to fill acquisition positions in the near future. Is the Navy/Marine Corps acquisition workforce expecting a large exodus by 2006 as the workforce reaches retirement age? What is being done to retain and recruit talent?



We continue to support USD(AT&L) human capital strategic planning efforts. We have also rigorously reviewed our retirement eligibility data. We see that many members will be eligible to retire, but historically, we haven't experienced a mass exodus as soon as people can retire. Of course, things like BRAC (base realignment and closure) often change that.

Of greater concern to me is our ability to attract and retain professionals, especially in the fields of contracting, cost estimating, and systems engineering. We've gained some good insight from the AT&L strategic effort, but we also have started working with some of the SYSCOMs (Naval Systems Commands) to drill down and identify the reasons we're having some problems with recruitment and retention. Another tool I anticipate being helpful is a skills-mix model that will help us identify alternative skill mixes along with numbers of people—military, civilian, and support contractor—to accomplish future missions. This past summer, we proved the concept with a pilot program at Marine Corps Systems Command, and I'm very excited about these prospects!

Finally, our major claimants rely heavily on acquisition interns. At any given time, we have nearly 900 in our Naval Acquisition Intern Program, a three-year program of education, training, and experiential assignments that results in a GS-12 posting. That number represents around 8 percent of our total acquisition professional community. Candidates are selected by the activity that will host the interns. We then work with the interns and their host activities to ensure that all interns engage in a rigorous program of training and experience to prepare them to assume senior leadership positions later in their careers.

We also fund undergraduate and graduate-level courses if they're needed to fulfill required or desired career field requirements. We're instituting a number of changes to be more effective and more cost-efficient. Some still have rough edges, but we're working with our customers to smooth them over. One big mismatch, for example, was our qualifying over 4,000 applications for 300 positions. This is what we did in FY03. So we're using "open windows" when candidates can submit applications to better match our applicants to needs. We're still working to determine the optimal timing. Our biggest challenge, as I mentioned earlier, is attracting qualified candidates for contracting, systems engineering, and cost estimating. We've examined a couple of new ideas for targeted recruiting, and I'm confident they'll pay off this year. For any of you aspiring acquisition warriors reading this, please visit our Web site: < https://www.nt.cnet.navy.mil/navyintern > . The bottom line is that we've had huge successes with the program. When I look around the naval acquisition com-



We've made sure that individuals being deployed to Iraq and Afghanistan for contingency contracting get the training they need beforehand. We're working with the Deserve community to develop a contracting "boot camp" that will provide critical skill sets needed when individuals deploy to contingency contracting billets.

munity today, I see a number of SES-ers who started their careers through an acquisition internship.



Who is most benefited by the DoN's acquisition workforce tuition assistance program (AWTAP)? Is the program being used as a recruiting vehicle to fill entry-level acquisition postings?



Ultimately, the sailors, Marines, soldiers, airmen, and allies who use the capability our acquisition warriors provide benefit from our AWTAP. So does the American taxpayer. AWTAP makes a more professional, business-savvy workforce. It starts with the individual AWF member. All members who want to pursue mandatory or desired DAWIA education requirements, or statutory requirements for acquisition professional community membership, can take advantage of AWTAP. We use certification and CL compliance as prerequisites to receive AWTAP funds, which serves as an incentive for members to focus first on basic DAWIA requirements. AWTAP is a strong selling point for prospective acquisition interns. They're immediately eligible for AWTAP funding; they don't have to wait some prescribed time period first.



One last question. How does the emergence of a new acquisition career field, such as facilities engineering (FE), affect training? How do you incorporate new training into the system? What kind of outreach is done?



When the facilities engineering career field was formed, we transferred about 1,600 existing AWF members from other career fields. We also included about 2,000 more people based on the new FE definition. That's a lot of people and a lot of training. In partnership with DAU and the FE Functional Board members, we've incorporated training into certification and CL requirements. We've also provided 36 months, rather than 18, to meet certification requirements. To get this information out, we use a variety of methods: Web sites, Facilities Engineering Functional Board, articles in Register-Now! and our DACM Web site. We also work closely with commands that have large numbers of facilities engineers, such as Naval Facilities Engineering Command.

Thanks so much for letting me share some of our efforts. Would you allow me one last commercial?

Please visit our Web site at < www.acquisition.navy. mil > and click on "acquisition career management" on the menu on the left. We recently joined Web sites with some of my ASN(RD&A) colleagues to provide the ASN(RD&A) Acquisition One Source. We're trying to provide one-stop shopping for our AWF members. I hope you'll visit us!

The Case for Transatlantic Cooperation—A U.S. Perspective

Knowledge-Enabled Warfare • Knowledge-Enabled Logistics • Knowledge-Enabled Business

Michael Wynne

hank you for that warm introduction, General Sharman [Maj. Gen. Alan Sharman, director general, U.K. Defence Manufacturer's Association]. It's a privilege for me to be here this morning.

General Farrell [Lt. Gen. Larry Farrell Jr., president/CEO, National Defense Industrial Association], it is good to see you as well, and thanks for your continued support of the defense industry.

As I look around, I see people here from the governments of the U.S., U.K. and our allies, as well as many of the industries that have long served the interests of our nations and the NATO Alliance so well. In fact, this great group is one of the best reasons for attending these meetings. You make us realize that despite our different economic and political needs, we share common interests that are a great source of strength for us all.

We all contribute to the common good of global order with representative governments that provide the backdrop for promoting prosperity, security, and individual rights. And we achieve these goals in our own very different ways.

Gatherings like the one today give us the opportunity to discuss those different ways and to search for best practices that we can all use in our home countries. It is important, though, that we take the time to make sure we

Editor's note: Acting Under Secretary of Defense for Acquisition, Technology and Logistics Michael Wynne spoke at the second U.S.-U.K. Defense Industry Symposium on June 2 in London. The one-day event was co-sponsored and organized by the National Defense Industrial Association and its U.K. counterpart, the Defence Manufacturers' Association, in close collaboration with the Defence Export Services Organisation, U.K. Ministry of Defence, and the U.S. Department of Defense Office of International Cooperation.

The objective of this yearly symposium is to facilitate networking between U.S. and U.K. defense and public security companies as well as between industry and government in the two nations. Industrial and government participation is encouraged to support and promote keener awareness of the business operating environments and specific commercial defense opportunities in both countries.

thoroughly understand the best practice and how it would translate in different countries.

That's what I want to talk to you about today—creating the understanding necessary so that we can all work together for the common good.

From the U.S. perspective, transatlantic defense cooperation will continue to play an essential role in furthering global security. We must ensure maximum effectiveness of all participants in the coalition wars that we will fight in the future. Effective industrial cooperation with our allies is a fundamental step in improving joint operational capabilities.

In the past, we cooperated successfully in developing many projects. One recent success story, of course, is the enhanced Harrier vertical-take-off-and-landing aircraft.

In fact, the U.S. and U.K. have

been cooperating for well over 100 years. It was you who invented the aircraft carrier back during World War I, and now it is integral to the American fleet.

And we are now working together with the United Kingdom on the Joint Strike Fighter, where you are our Level One partner.

As a businessman, I've developed programs abroad and have great respect for the capabilities of partner nations and industries. The most successful cooperative programs started partnering early in the development phase, where

requirements could be harmonized and costs, technology, and work could be shared equitably.

I know U.K. and European defense industries have much to contribute to U.S. defense capabilities. From technologies such as turbine engine systems, micro-electro-mechanical systems, and composite materials, to subsystems such as high-thrust rocket propulsion systems, to the world-class helicopters produced on this side of the Atlantic, America can benefit greatly through cooperation with our allies.

Everyone out there who wants to do
business with the U.S. Department of
Defense, take note: Any product
generated in the next few years must
move our defense enterprise posture
toward the objective of knowledge-based
warfare, or it won't reach the field.

Unfortunately, we are experiencing roadblocks to this cooperation today—including differing national priorities, governmental processes, and most important, relative investment strategies.

However, even after these roadblocks are removed, we will still have certain impediments to defense industrial cooperation that we will have to work around, such as re-

strictions on certain technology transfers. Despite these issues, our nations' governments and industries continue to make great progress in our cooperative efforts.

In fact, I'd like to point out that transatlantic cooperation isn't just about the big-ticket programs. Data and personnel exchanges and programs such as our foreign cooperative testing are equally important.



The cabin of a CH-47 Chinook helicopter provides 42 cubic meters of cargo space and 21 square meters of cargo floor area and can accommodate two HMMWVs (High Mobility Multipurpose Wheeled Vehicles) or a HMMWV together with a 105mm howitzer and gun crew. The main cabin can hold up to 33 fully equipped troops. For medical evacuation, the cabin can accommodate 24 litters. The Chinook has a triple hook system, that provides stability to large external loads or the capacity for multiple external loads.



Soldiers dismount from a High Mobility Multipurpose Wheeled Vehicle (HMMWV).

In the past two-plus decades, the U.S. has evaluated 184 non-developmental items from the U.K. alone. As a result, we purchased more than 50 items for more than \$2 billion from U.K. companies. The return on the cost for testing to the cost avoided in research and technology is enormous.

To continue our successful record of transatlantic cooperation, we must continue to find opportunities to come together and share ideas. Today's symposium is at the less formal end of the spectrum.

Tomorrow, I will engage U.K. representatives at the second U.S.-U.K. Bilateral Defense Acquisition Committee meeting. This high-level government-to-government forum will address difficult issues such as technology transfer and the licensing process.

This and other ongoing meetings, as well as conferences like this, are reasons I am convinced U.S.-U.K. ties are especially strong—and that we routinely have frank and open communications. This is key to resolving the issues and problems that are inherent in any cooperative activity. I would like to thank today's sponsors for bringing us together.

All of this makes the U.S. and its allies and trading partners natural candidates for closer cooperation in the development of technology and equipment. We have cooperated in some successful programs in the past, but we can—and must—do more in the future.

Knowledge-Enabled Warfare

The enemies we are fighting now are different. They don't just threaten a country's borders or a particular interest. Instead they aim to destroy the fundamental fabric of our civilization; they want to take away our freedom and our feeling of security.

Therefore, we are moving toward knowledge-based warfare, or knowledge-enabled warfare. In fact, the overriding objective of U.S. defense acquisition is acquiring materiel and systems that enable knowledge-based warfare. This also underscores our approach to logistics, with knowledge-enabled logistics; and our business processes, with knowledge-enabled business.

So everyone out there who wants to do business with the U.S. Department of Defense, take note: Any product generated in the next few years must move our defense enterprise posture toward the objective of knowledge-based warfare, or it won't reach the field.

Here's a good example: Last January, we began to require the marking of all of our items with a unique identifier, or UID. It is the defense equivalent of the Universal Product Code, or a bar code.

We also now record the value for that marked part as it comes into our inventory, as part of something we call its "birth record." This record will be a feeder into the asset part of our financial statement, enabling us to have an accurate audit.

Unique Identification

In addition to the unique identification system, we are taking the next step of adding radio frequency ID tags, or RFIDs. Starting in January 2005, we are going to require these smart tags on cases, pallets, and packaging of DoDpurchased items. Though we were slow to start using UIDs, we expect to be on the leading edge for radio frequency identification.

The world's largest retailer, Wal-Mart, figured out before we did that given the scope of our logistics challenge, we need to go the route of the RFID—and quickly. Therefore, we are partnering with Wal-Mart for RFID. Between the two organizations, we will be covering a wide dispersion of manufacturing and distribution.

This will effectively open the RFID market by introducing volumes not expected for years in the future.

This is a partnering opportunity for all of you as well: We'll be looking for your ideas and innovations in UID and RFID technology. Your support to internationalize these approaches will also be of great help.

UID and RFID are just two ways the American military is embracing knowledge-based warfare on a daily basis. This new way of looking at the way we do business requires that we focus on our networking abilities. In other words, we must be network-centric if knowledge-based warfare is to succeed.

Network-centric Systems

If our new systems are not network-centric, and if the information collected by all of our many and growing numbers of sensors is not available to all who could make use of it, then we are not efficiently trading manpower for technology.

In NATO, we all have large legacy forces now. The question is how do we introduce C3I [command, control, communications, and intelligence] systems to legacy systems without having to recapitalize. If increased situational awareness is the key, why can't we embed them in legacy equipment?

The emerging U.S. and likely NATO strategy scope is global. We must arrive quickly, with overwhelming force, having departed on short notice. The demands for information gathering, processing, disseminating, and reprocessing drive us toward networked, interoperable solutions.

Just about every platform one can think of—a strike aircraft, an infantry vehicle, or a warship—is, or will even-

The emerging U.S. and likely NATO strategy scope is global. We must arrive quickly, with overwhelming force, having departed on short notice. The demands for information gathering, processing, disseminating, and reprocessing drive us toward networked, interoperable solutions.

tually be, an information gatherer for the network. Traditionally, the information those platforms have gathered has been reserved for their own internal use: defense, targeting, and so on.

The U.S. Army's Future Combat System and the Navy's Cooperative Engagement Capability offer examples of the way forward. The basic premise of both of those sys-

tems is networking and information sharing.

In fact, that premise underlies our entire push toward knowledge-enabled warfare, which is, with our technological edge, just about any platform—from satellites to submarines, and from unmanned aerial vehicles to infantrymen—that can generate some level of information that can then be turned into intelligence and networked for anyone else in the battlespace to use.

How do we allow our partners to have access to this? Perhaps a thin client arrangement, or maybe a thick client for certain applications.



Port theater distribution.

Logistics

As we continue to move towards this new knowledge-enabled warfare, we must not forget the other cornerstone of operations—logistics. Our military services have come far in reducing the iron mountains of munitions and parts that were necessary in industrial age warfare of the past, but not far enough to meet the new needs of information age warfare.

The Navy needs to buy ships in which the crew can lock the engine rooms during deployment. We don't have airmen servicing the engines of B-52s on global missions; why should we tolerate sailors doing this on destroyers?

The Army needs to field hybrid-fuel, ultra-reliable engines for use across their vehicle fleet. And the Air Force must have expeditionary strike aircraft that don't need to take an entire airbase of parts and technicians with them to remote regions of the world.

There is tremendous opportunity in the logistics technologies—not as glamorous, but very nicely profitable and quite open—by allowing commercial development IT and others to directly transfer.

We need corrosion-resistant trucks, aircraft, and ships. We can't afford to recap at rates of the past; we must be able to keep what we have and not necessarily define its length of life.

We also need expeditionary logistics units that can defend themselves against attacks by insurgents and are protected against theater ballistic missiles. Our ports and offshore sustainment stocks are going to need manned and unmanned maritime surveillance for protection.

This new national security era, with its new international security relationships, demands innovation, practical near-term responses, and efficient resourcing. That's where international industrial partnerships can, and must, play a crucial role.

If allies and partners want to work with us, they have to ask themselves how consistent a particular product is with our goals of providing integrated and efficient logistics; developing and fielding products with a systems engineering philosophy established at the outset; fighting from a position of technological dominance; and rationalizing resources.

As our international partners offer solutions, systems, and capabilities—and we expect brilliance and innovation from them—they must keep our goals and our new approach to fighting in mind. They must reflect on the priority our national leadership has given to military transformation and must remember the basic element of that transformation—knowledge-enabled warfare and all that it entails,

including network centricity; jointness; and multi-mission, multi-Service, and cross-cultural capability.

U.S. Approach to Transformation— Seven Goals

Transformation is not equipment-focused. It's cultural training, tactics, techniques, and procedures. To help those of you who want to do business with the U.S. military, I'll briefly discuss how the Department of Defense is approaching our transformation to be more attuned to securing global security in the 21st century.

We have seven goals that are central to maintaining our path to excellence. It's important that you, our partners, understand them.

They are:

- Integrated and efficient logistics
- Systems integration and engineering for mission success
- Technology dominance
- Resources rationalized



Soldiers unload relief supplies.

- Acquisition excellence with integrity, which is shortening the cycle but holding to high ethical standards domestically and internationally
- A strengthened industrial base, where we pay for performance ensuring a fair return for our industry, encouraging their reinvestment in defense products
- A motivated and agile workforce, using distance learning and Internet Web-based procurement for fielded units.

I'll go into detail on the first four, because I think they're of the most interest to you, our allies and partners.

Integrated and Efficient Logistics

One of the most important areas is integrated and efficient logistics. Our vision for the logistics officer of the future is a person who will be the commander's combat power manager. At his or her fingertips will be a precise account of how much combat power—expressed in terms of combat systems, munitions, fuels, and replacement stocks—is at hand and how much would be expended over a given course of action. Interoperability takes on different, but no less important, characteristics here from those in operations.

Systems Integration and Engineering for Mission Success

We have to reenergize the systems view of integrated architectures by instilling systems engineering best practices at all levels of our architectures. Network-centric, information-age warfighting demands increasingly complex interoperability at the system-of-systems, systems, and component levels.

Technology Dominance

The third area of importance is technology dominance. Warfighters and logisticians must have technologically superior military systems. We in the U.S. fully recognize that our country does not have a lock on leading technologies. Both we and our allies have technologies needed by the other to ensure that coalitions have the best possible equipment—and that it can interoperate.

Rationalization of Resources

Finally, we have rationalization of resources. In the U.S. Defense Department, we are constantly seeking ways to make optimum use of our people, materiel, and money through such means as improving joint-Service use of assets, transforming some of our support functions to industry, and repositioning infrastructure around the world, to better face the 21st-century strategies.

But there is another area that I believe is very important from overall alliance and coalition perspectives, and that is the rationalization of requirements for military assets. Our respective governments spend too much money on duplicating already-existing capabilities or independently developing what is essentially the same future capability.

Our respective governments spend too much money on duplicating already-existing capabilities. This ties up limited national budgets and precludes their use in filling stockpiles or modernizing other forces.

All of us have to do a better job in working together at both the government and industry levels to get the most bang for the buck.

This ties up limited national budgets and precludes their use in filling stockpiles or modernizing other forces. All of us have to do a better job in working together at both the government and industry levels to get the most bang for the buck.

Armaments Cooperation an Imperative

These are basically my thoughts on what we in the U.S. Department of Defense, industry, and our allies and partners need to be looking at to enhance global security in this century. I am confident that in the future, armaments cooperation among the U.S., the U.K., and our friends around the world will build on the strong base we have established in the past and that we will realize even more success in the future

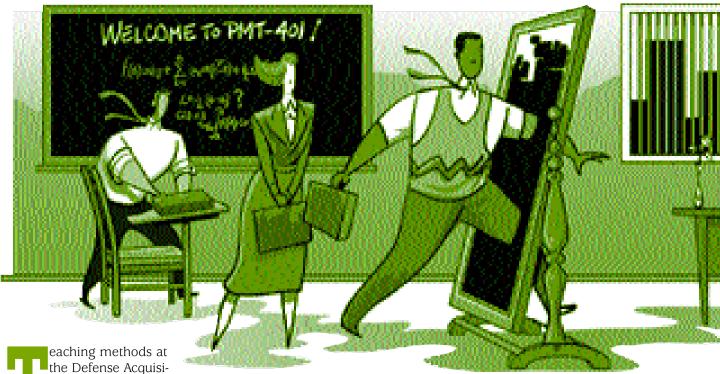
In these troubled times that involve entirely new and uncertain international paradigms, I believe that armaments cooperation is not only desirable, but also an imperative, to reinforce coalitions and the sharing of the mutual defense burden.

Thank you very much for your terrific support of British and United States soldiers, sailors, airmen, and Marines around the world.

Through the Looking Glass

A New Way to Learn Program Management

Owen C. Gadeken



tion University (DAU) have changed markedly in recent years. Gone are the classroom days filled with lectures and seminars led by expert practitioners. These days, well before they arrive on campus, students spend hours learning acquisition basics in online modules so that once they arrive on campus, precious classroom time can be spent in case studies and team exercises focused on applying the basic material. While new technology applications are most evident in our online instruction, innovative approaches are also being applied in the classroom. One of these new approaches is the large scale management simulation, Looking Glass, Inc.®, that DAU licenses from the Center for Creative Leadership (CCL) in Greensboro, N.C. As indicated by its title, CCL is no stranger to creative training. Initially developed under a grant from the Office of Naval Research, Looking Glass has now become the most popular behavioral simulation in the world. It has also helped propel CCL into the top position in the world marketplace for leadership development, according to a recent Business Week executive education survey.

Bringing the Real World to the Classroom

DAU uses Looking Glass as a capstone exercise in its PMT-401 Program Manager's Course, a rigorous 10-week resident course built around case studies of current acquisition programs. Looking Glass helps participants move beyond the cognitive and analytical skills applied on the case studies to hands-on application in a simulated real-world environment.

Looking Glass is not a defense or program management simulation; however—remarkably—it mirrors the same challenges faced by defense program managers:

- Developing an acquisition strategy for the future
- Transitioning research and development products to the customer
- Handling production capacity limits and increased demand
- Resolving difficulties with international collaboration and competition

Gadeken is a professor at the DAU Fort Belvoir campus. His current interest centers on helping program managers become effective leaders. Gadeken received his doctorate in engineering management from the George Washington University.

- Dealing with raw material shortages
- Coping with environmental and legal issues
- Adjusting to corporate and public policies
- Deciding what to do with a nonproductive plant or a problem employee
- Working effectively in division and corporate cross-functional teams

are written and delivered, and people interact. Almost invisible are the faculty facilitators who watch and record these interactions for later "play back" during the debriefings.

A unique feature of the Looking Glass simulation is the freedom allowed participants. There is very little structure during the exercise, so participants can move freely



POVING GLASS HELPS
PARTICIPANTS MODE DEVOND
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APPLIED ON THE CASE STUDIES
TO HANDS-ON APPLICATION
IN A SIMULATED
REAL-WORLD ENVIRONMENT.

Looking Glass is a six-hour simulation of a glass manufacturing company with 4,000 employees and over \$200 million in sales. The company has three operating divisions, each facing a different internal and external operating environment. In each run of the simulation, DAU students are the top management team, in positions ranging from president to plant managers.

The day before the course begins, students are introduced to the simulation in a short session designed to familiarize them with the company, the top management positions, and each other. They learn the ground rules for the simulation and are given a glossy Looking Glass annual report. Then they select their positions and are each given an in-basket of memos and reports to review before the next day. Their in-baskets include division history, product information, and financial data, laced with over 150 problems and opportunities ranging from strategic investments to personnel issues.

Arriving at "work" the next day, participants find their own office area complete with desks, intercom phones, in- and out-baskets, and meeting tables. After a few administrative remarks, the company is open for business. Meetings are scheduled, telephones start ringing, memos

from their desks to meetings and informal discussions. By memo, phone, or in person, participants can contact anyone inside or outside the company. The high pace of activity mirrors the typical program office environment and makes it easy for participants to fall into their normal management style and behavior.

Analyzing the Experience

After the six continuous hours of activity, which include a working lunch, the simulation ends with an all-hands meeting chaired by the company president. This is followed by a detailed questionnaire in which participants document the information they knew, the issues they addressed, decisions that were made, and the perceived effectiveness of their peers and their division. This information is combined and compared with norms from the CCL database for later use in the debriefing process.

The debriefings are really the heart of the Looking Glass experience. Based primarily on participants' reflections on their behavior and the outcomes resulting from it, three separate debriefing sessions are used to "unpack" the exercise and create meaningful learning opportunities. Like peeling an onion, each debriefing allows par-

Traditional vs. Experiental Learning



ticipants to see more of their behavior, what worked and what didn't, and the impact it had on other participants. The first debriefing captures participants' immediate reaction to the simulation. The second addresses division (team) effectiveness. The third debriefing is a peer feedback process. Both facilitators and peers share their observations in a structured process designed to help participants identify their managerial strengths and weaknesses and set goals for improvement.

Effectiveness of Experiential Learning

The Looking Glass design is based on the experiential learning model. This model is the complete opposite of the traditional learning model. In traditional learning, the teacher teaches and the student applies. With traditional learning, students are left with the often difficult task of making the transition from the classroom to the workplace. In experiential learning, students are first given an experience where they must apply their current knowledge or practice. Then they are asked to examine results achieved and generate their own learning, which can be applied to improve their performance back at work. Two

TWO KEY PRINCIPLES

DIFFERENTIATE EXPERIENTIAL

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key principles differentiate experiential from traditional learning: experiential learning begins with an experience or application, and the student is in charge during the entire process. The difference is shown graphically (left) in "Traditional vs. Experiential Learning."

How effective is this process? Both CCL and DAU have conducted follow-up research on the impact of the Looking Glass once participants return to the workplace. CCL studied 72 participants in four separate programs who identified a total of 287 lessons learned. CCL con-

cluded that Looking Glass "provides developmental feedback and learning in important areas of managerial action and adds to that by providing the opportunity for new awareness in the often more inaccessible domains of self-management and the nature of managerial work."

DAU evaluated 100 participants who took Looking Glass as an elective in the former Advanced Program Management Course and tracked them against a control group of students who had not taken Looking Glass. In the threemonth follow-up back at work, Looking Glass participants significantly exceeded the control group in total goals submitted, management and leadership goals submitted, management and leadership goals achieved, and new management and leadership actions reported. Achieved goals dealt primarily with interpersonal skills, but also included problem solving, initiative, influence, and efficient use of resources. A surprising aspect of the study was the number of new actions taken that had not been set as goals immediately after the exercise. These actions were double the number of goals achieved from the formal goal-setting exercise. They fell into the same skill categories above, but two new areas also emerged: increased self-confidence and improved conceptual (strategic) focus.

After the success achieved using Looking Glass in the DAU Program Manager's Course, other potential uses of the simulation have emerged. Most noted of these is use with intact program office teams from the workplace. Here, the benefits go beyond personal development to include team building and understanding the impact of the organization's culture on performance. As an example of this application, DAU conducted three separate Looking Glass workshops for the Navy Standard Missile Program Office that included participants from their prime and support contractors. A half-day was added at the end of each workshop to address program-unique issues brought up during the simulation debriefs. This session was also used to generate action items to improve team and organization performance back at work.

Multi-dimensional Learning Opportunities

In summary, organizational simulations such as the Looking Glass provide learning opportunities on several di-

THE SIMPLE LESSON THAT TO MANAGE OR LEAD OTHERS. FUTURE PROGRAM MANAGERS MUST FIRST LOOK WITHIN TO MANAGE AND LEAD THEMSELVES.

mensions. First, they allow direct application of basic program management skills such as planning, organizing, problem solving, and decision making with the opportunity to assess the results and impact. Second, participants are given the opportunity to demonstrate the full spectrum of interpersonal skills, including communication, listening, influence, and conflict resolution. Third, these simulations allow participants to benefit from a real team experience and deal with the different functional perspectives that must be accommodated to ensure team success. Finally, the larger scale of the Looking Glass exercise brings out true organizational dynamics as the different divisions (teams) must work together to achieve broader organizational objectives.

Professional acquisition managers face a constant stream of meetings, suspenses, problems, and unexpected events in their day-to-day work environment, but the hectic pace of the real world offers managers little opportunity to reflect on their experiences and learn from them. In Looking Glass, the carefully designed experience, reflection, and debriefing process does offer this opportunity. Through it, managers learn to see themselves and their skill set in a different and much clearer light.

As its name suggests, Looking Glass literally offers managers a mirror with which they can see a reflection of their behavior and its impact on others. Looking Glass reinforces the simple lesson that to manage or lead others, future program managers must first look within to manage and lead themselves.

Editor's note: The author welcomes questions and comments and can be reached at owen.gadeken@dau.mil.

What The Students Say

We asked students in the most recent PMT-401 course what they thought of Looking Glass. Here is a sampling of responses:

- "Looking Glass provided useful insight into my managerial style. Feedback was specific and aimed at helping my job performance in the future. Much appreciated—keep using this simulation."
- "Looking Glass was excellent to simulate the time crunch we are all under."
- "Looking Glass was particularly valuable in providing an opportunity to stand in the shoes of an industry executive and deal with his challenges and pressures."
- "The simulation was very credible and realistic as far as problems and complexity of issues. This allowed me to put myself into the role."
- "Turned out to be much more enjoyable than I had expected and much more effective than classroom learning experience."

Participants in a recent Navy Standard Missile Looking Glass workshop were asked what they had learned from the experience. Here is what they said:

- "I learned that although I have strong points, the weak ones need work. I need to work on looking at the long term, not just what will happen tomorrow (tactical vs. strategic). I am good at sharing information; however, need to work on building a coalition."
- "It was very frustrating to take a back seat, but I fell into the trap that I complain about. When leadership is busy, take action, don't wait. I also confirmed that we have a great team."
- "I learned the importance of personal values."

What would the students tell prospective participants to expect from the Looking Glass experience?

- "The experience demands that you operate out of the box and encourages creative thinking."
- "Excellent opportunity for team building and to illustrate 'issues' with organizations and people that are too hard to do in a real world environment"
- "They should expect an interesting experience with an opportunity to take what they learn and apply it in improving future performance."

Army Gets New Combat Uniform

Sgt. 1st Class Marcia Triggs, USA

ASHINGTON (June 14, 2004)—The Army will be fielding a new combat uniform designed by NCOs and tested by Stryker brigade soldiers in Iraq since October.

On the Army's 229th birthday, senior leadership introduced the Army Combat Uniform (ACU) during a Pentagon cake-cutting ceremony. Soldiers were on display, suited-up in the wrinkle-free uniform with a digitized camouflage pattern.

Three different versions of the ACU have been developed, and more than 10,000 uniforms have been produced and dragged through the sand in Iraq and at Army training centers. Even more are on American production lines to be issued by April 2005 to soldiers in deploying units. Fielding to the total Army should be complete by December 2007, said officials from the Program Executive Office, known as PEO Soldier

Changes Functional, not Cosmetic

There were 20 changes made to the uniform, to include removing the color black and adapting the digital print from the Marine Corps uniform to meet the needs of the Army, said Sgt. 1st Class Jeff Myhre, the Clothing and Individual Equipment noncommissioned officer in charge.

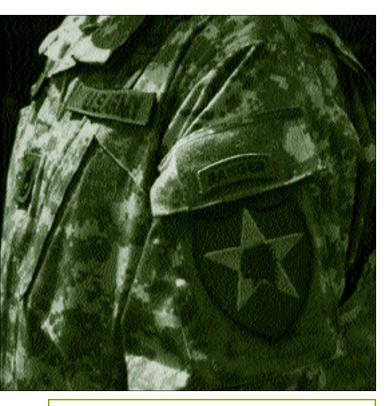
Black is no longer useful on the uniform because it is not a color commonly found in nature. Another drawback to black is that its color immediately catches the eye, he added.

"The color scheme in the ACU capitalizes on the environments that we operate in," Myhre said. "The current colors on the ACU are greenwoodland, grey-urban environments, and sand brown-desert. The pattern is not a 100-percent solution in every environment, but a good solution across the board."

"This isn't about a cosmetic redesign of the uniform," said Col. John Norwood, the project manager for Clothing and Individual Equipment.



Army Sgt. 1st Class Jeff Myhre, noncommissioned officer in charge of clothing and individual equipment for PEO Soldier, demonstrates the zipper at the top and bottom of the new Army Combat Uniform (ACU), the recently approved wear for soldiers. The new uniform contains 20 improvements.



The pocket-shoulders are a result of feedback from combat soldiers. They replace the bottom pockets on the blouse of the battle dress uniform. The shoulders are bellowed to allow increased movement.

"It's a functionality change of the uniform that will improve the ability of soldiers to execute their combat mission."

Every change was made for a reason. The bottom pockets on the jacket were removed and placed on the shoulder sleeves so soldiers can have access to them while wearing body armor. The pockets were also tilted forward so that they are easily accessible. Buttons were replaced with zippers that open from the top and bottom to provide comfort while wearing armor.

Patches and tabs are affixed to the uniform with VEL-CRO® brand hook and loop fasteners to give the wearer more flexibility and to save the soldier money and time, Myhre said. Soldiers can take the name-tapes and patches off their uniforms before laundering, which will add to the life cycle of the patches. In addition, the cost to get patches sewn on will be eliminated.

The ACU will consist of a jacket, trousers, moisture wicking t-shirt, and brown combat boots. It will replace both versions of the battle dress uniform (BDU) and the desert camouflage uniform. The black beret will be the normal headgear for the ACU, but there is a matching patrol cap to be worn at the commander's discretion.

The ACU costs \$88, about \$30 more than the BDU; however, in the long term, soldiers will save money and time



Left and right bellowed calf-storage pockets and no-shine desert boots are new additions to the ACU.

Three different versions of the ACU have been developed, and more than 10,000 uniforms have been produced and dragged through the sand in Iraq and at Army training centers.

by not having to take uniforms to the cleaners or shine boots

The Design Process

The life of the ACU began in January 2003 when PEO Soldier teamed with Myhre, Master Sgt. Alex Samoba, and Staff Sgt. Matt Goodine—all from the 1st Stryker Brigade, Fort Lewis. Wash.

The team looked at a number of uniforms and took the best part of each uniform and combined them into one. They built their first prototype and delivered 25 uniforms to Stryker squads at the National Training Center. After listening to soldiers' comments, the team went back to the lab and created prototype two.

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Twenty-one prototype two uniforms were then delivered to Stryker soldiers at the Joint Training and Readiness Center, Fort Polk, La., and assessed. "We watched soldiers as they entered and cleared rooms, as they carried their rucksacks, and as they did everything they had to be able to do in the uniform, and then we came up with prototype three," Myhre said.

Two issues of the third version were given to the Stryker soldiers deploying to Iraq. Three months ago, Myhre was among a team who visited Iraq to get more feedback from soldiers. "We talked to soldiers right after they had completed a mission and while the benefits of the uniform were still fresh in their minds. We wanted to know how the uniform helped the mission."

New Uniform Earns Support

Sgt. Maj. of the Army Kenneth Preston is one of the ACU's biggest supporters. He said major command sergeants major had a chance to see the uniform and give advice toward the final version.

"We have not made a major change to our uniforms since the BDUs were introduced in the early 1980s," Preston said. "This new uniform performs well in multiple environments. Its new pockets and color designs are a result of feedback from soldiers in combat. Every modification made on the uniform was designed with a specific purpose and not just for the sake of change."

Uniform changes are:

- Mandarin collar that can be worn up or down
- Rank insignia centered on the front of the blouse
- VELCRO for wearing unit patch, skill tabs, and recognition devices
- Zippered front closure
- Elbow pouch for internal elbow pad inserts
- Knee pouch for internal knee pad inserts
- Drawstring leg cuff
- Tilted chest pockets with VELCRO closure
- Three-slot pen pocket on bottom of sleeve
- Velcro sleeve cuff closure
- Shoulder pockets with VELCRO
- Forward tilted cargo pockets
- Integrated blouse bellows for increased upper body mobility
- Integrated Friend or Foe Identification Square on both left and right shoulder pocket flap
- Bellowed calf-storage pocket on left and right leg
- Moisture-wicking desert tan t-shirt
- Patrol cap with double thick bill and internal pocket
- Improved hot-weather desert boot or temperate-weather desert boot
- Two-inch, black nylon web belt
- Moisture-wicking socks.

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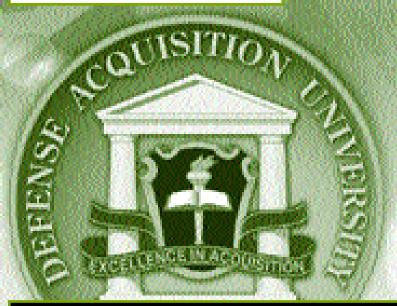
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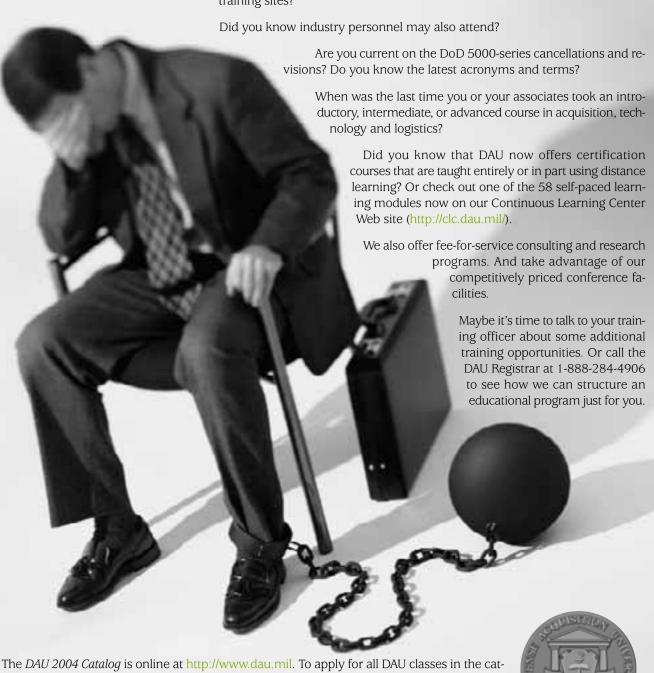


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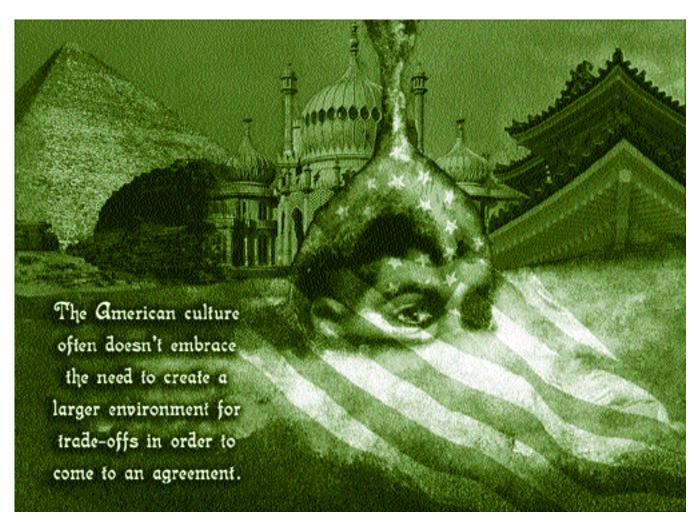
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The Importance of Culture and Bargaining in International Negotiations

Bruno S. Wengrowski



uring the course of my contracting professional life, I served more that twenty years in overseas assignments. I had the opportunity to visit more than 40 countries on five continents. Though the predominant international commercial language is English, and the universally accepted currency is the U. S. dollar, the bargaining process and cultural awareness of a given country have a profound impact on success or failure on negotiations and business arrangements.

Most negotiations focus on terms, conditions, and prices in order for the parties to mutually agree to form a contract. The American culture often doesn't embrace the need to create a larger environment for trade offs in order to come to an agreement. Our considerations are often limited to cost or price and are fact-based, either on data provided or an audit. In international discussions and negotiations, the culture often requires that additional non-price trade-offs are included in the negotiations. Frequently

Wengrowski writes from the perspective of more than 20 years of overseas assignments in Italy, Germany, and Singapore. He is a professor of contract management for the Defense Acquisition University's South Region Campus in Huntsville, Ala., where he teaches Contingency Contracting, Shaping Smart Business Decisions, and Advanced Business Solutions for Mission Support.

in a foreign culture, extensive bargaining must occur as a matter of course in order to save face, and this extensive bargaining can be leveraged to get a better overall deal or to get more bang for the buck.

The Importance of Bargaining

When I was a Navy contracting officer assigned in Naples, Italy, a severely storm-damaged destroyer required extensive repairs. The ship was directed to Greece where the repairs would be done under a non-competitive contract. During the repair period of three weeks, further critical damage was discovered and needed to be fixed. It was the end of the fiscal year, and no additional funds were available. For the safety of the ship, the work could not be canceled or delayed. A fair and reasonable amount for the newly identified repairs was \$40,000. I had only \$15,000.

The contractor, a large shipyard in Greece, displayed in its boardroom the plaques of some 60 U.S. Navy ships that had been repaired in its yard. The company's glossy brochure featured photographs of the Navy plaques on its cover. Because of political differences with Greece at the time, no ship repairs had been done in more than two years. Realizing the political and public relations value the current repair could have to the company, I decided to leverage the intangible value of a ship's plaque against my \$25,000 shortfall. The ship's crew had the capability to manufacture a plaque. I met with the skipper to inform him of my negotiation strategy.

The ship yard did first-class work, and the ship's commanding officer agreed to write a letter of appreciation on the ship's letterhead. The work was completed on time at the reduced price, and we avoided the additional \$25,000 cost of the repairs. The shipyard hosted a presentation ceremony, including photographs. The brochure produced by the company for the next year prominently displayed the plaque, letter of appreciation, and a photo of the presentation. The use of bargaining saved the Navy \$25,000 and was worth the amount, in kind, to the shipyard.

Where Culture Comes in

Bargaining is most impacted by the culture in the overseas country. To prepare properly, the negotiator must have an awareness of how information is assimilated, history, concept of time, customs and practices, behavioral taboos, and geography of the given country.

Assimilation of Information

First of all, the negotiator must appreciate how information presented is received, absorbed, digested, calculated, and summarized. Most Europeans think in a linear fashion, like Americans. We go from point A to point B, to point C, and so on, until we reach a conclusion based on a logical progression. Many other cultures, especially Mid-

dle Eastern, Asian, and African countries think in a circular pattern, with the additional bits of information rolled into the next concept. Both parties may reach the same conclusions; however, the amount of time taken, the thought processes, and the rituals associated with ensuing discussions are significantly different.

Perception of Time

In cultures other than our own, people's perception of time is linked with their view of history. Chinese and Russian cultures, for example, think in terms of centuries, not years, and history is a continuum. There's usually not a sense of urgency unless there's a life-threatening situation. On the other hand, the tendency of Americans is to be very time-conscious. Time is considered a precious commodity; time lost is viewed as an opportunity lost. Americans often arrive in advance of a scheduled meeting. Conversely, other cultures may consider that time is relative to other commitments and appointments, not an hour and minute on the clock. Punctuality is often not considered a virtue, and many cultures consider individuals who are preoccupied with timeliness to be impulsive or impertinent.

Meeting Rituals

Different cultures have different views of proper negotiation form. A society may consider local custom, culture, and business practices inextricably linked. It's often the perception that in many overseas business meetings, nothing "productive" occurs during the first scheduled appointment—just introductions, pleasantries, and exchange of business cards.

The importance of (in particular) the business card ritual as the prelude to a meeting cannot be over emphasized. It is recommended that the business card be printed on both sides. One side should be in English and the other in the host nation language. Titles are very important, since many cultures are position- or rank-conscious. The business card should be kept in a small container in the breast pocket of the shirt or suit coat, not in a wallet in the pants pocket. This creates the impression that the person carrying the card considers the other person important enough to make a presentation from the heart. Most countries have a ritual associated with the presentation of the card. For example in Asia, the card is held with both hands and the person presenting gently nods his/her head. When you receive the card, take a minute or so to study it. If you immediately place the card in your pocket, you may create an impression that your counterpart is inferior.

Overseas meetings can run the gamut from very informal to highly structured, depending on the location and the familiarity between the parties. Meetings are often accompanied with large amounts of tea, coffee, local beverages, and often food. If one keeps drinking, the host

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Different cultures
have different views
of proper negotiation form.

will keep pouring. Once the guest has had sufficient refreshment, the cup should be left full. The guest should not attempt to cover the cup when the beverage is poured, since that action implies the offering is lacking in taste or not fresh. Get used to tobacco smoke during an international meeting. Many countries don't have the prohibitions against smoking that are enforced in the United States.

Don't anticipate that final agreement will be reached in one or two meetings. The initial meeting is often social, and it may not be until the second meeting that topics or business areas of interest are introduced. In some countries, business is discussed over lunch, and the lunch meeting may drift into a dinner meeting when the parties get into more details. In other countries, business is never discussed over meals. The final meeting to consummate the agreement is usually in an office setting, and there is often a separate session scheduled for the actual signing of the contract, which is usually followed by an exchange of gifts and the taking of photographs.

Local Etiquette

As final notes on cultural and ethnic awareness, inform yourself of social taboos, acceptable gestures, and use of words in the country—or even the part of the country—where you will be negotiating. Our sign for "OK," for example, has an entirely different meaning in other parts of the world. Sometimes the written word is the safest for common understanding within a given country. In the People's Republic of China, for instance, where there are many distinct dialects, a word spoken in one region's dialect may have an entirely different meaning in the dialect of another part of the country. The written symbols, however, are universally understood.

Language

A major consideration is that your foreign counterpart know English as a second or third language. Even so, allow your foreign counterpart time to comprehend and assimilate the English language. Avoid American slang, business and military jargon, acronym-speak, and extremely colloquial expressions. They often have a short shelf life and confuse the listener. It is very difficult to explain slang phrases like "What's up with that?" or "My



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bad!" Jargon expressions like "hit the ground running" or "pushing the envelope" are likely to mean nothing to many non-native English speakers. And remember that since acronyms universally understood within the Department of Defense aren't comprehensible even to most non-DoD Americans, foreigners certainly won't understand them.

Advance preparation with regard to knowledge of the culture, customs, and language of a given country cannot be stressed enough. The Department of State is a source of literature on aspects of culture and customs in different countries. Another excellent resource is *Do's and Taboos around the World*, published by the Parker Pen Company and edited by Roger E. Axtell, who has authored several books on the subjects of do's and taboos of international trade, hosting international visitors, public speaking, and body language.

Creative Negotiations Make for a Win-Win Situation

Once the cultural aspects of negotiations have been considered, the next concept is bargaining, which provides the parties with an opportunity for a win-win situation in negotiations. Trade-offs made in lieu of prices or cost considerations need to be part of the negotiation strategy. To illustrate, I will use a personal bargaining experience.

I was the technical director for contracting and procurement for an office in Singapore that supported the Joint Task Force for Full Accounting (JTF-FA) program in Vietnam, Cambodia, and Laos. The JTF-FA mission was to locate the remains of missing in action (MIA) pilots, airmen, and soldiers. The contractor was affiliated with the Vietnamese Air Force and had completed two contracts. The program had been in existence before the United States and the People's Socialist Republic of Vietnam had diplomatic relations.

As a result of budgetary cutbacks and the diminishing number of likely sites for the MIA remains, the program funding was cut by approximately 20 percent, or more than \$5,000,000, over the period of the contract. Our dilemma was compounded by the fact that the contractor had been encouraged by the program manager (PM) to buy newer, larger-capacity helicopters, replacing the Soviet MI 8 with the MI 17 model. The newer helicopters were more expensive to maintain than the older model. The two previous contracts had contained a requirement that one helicopter be available on a 24/7 schedule to extract our personnel in the event of civil unrest. Since diplomatic relations had been formalized with Vietnam, that requirement would not be included in the next contract. The Vietnamese relied on the payment in U.S. dollars since the helicopters and their parts were purchased from the Russians with U.S. dollars. The Vietnamese dong currency had no international standard to leverage overseas buying. All other imports were paid in dollars, especially fuel and lubricants. Our team knew that the negotiations would be extremely delicate as compared to previous negotiations because the reduction in the price of the next contract—the result of no standby helicopter and fewer missions—would be unpalatable to the contractor.

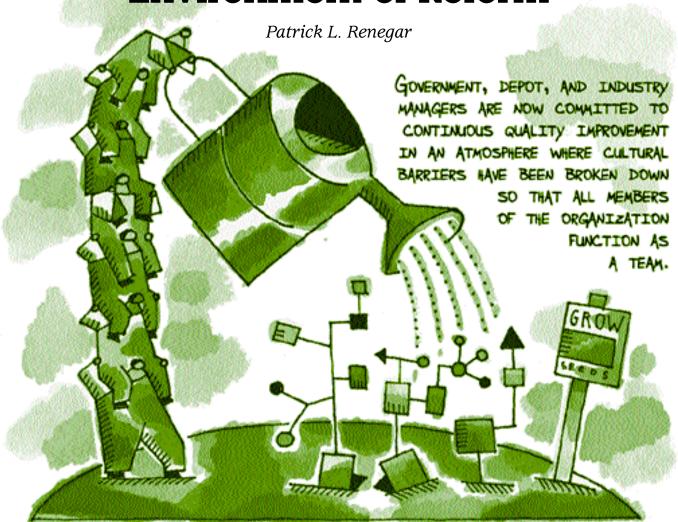
We needed to employ a unique, creative strategy for the impending negotiations. I met with the PM in Bangkok to discuss and implement a plan for negotiations. The strategy would include educating the Vietnamese contractor to understand and use capitalist approaches and Western business practices. The previous contracts were priced per mission, based on continuous use of two helicopters, as indicated above. Because most of the sites as likely areas for MIA remains had been identified, we could determine with certitude the exact number of missions required per year. Each mission lasted between 30 and 45 days. The JTF support personnel to assist in the searches were available for six-week periods, and the PM could identify the specific dates for each mission. We worked closely with the customer to identify the exact requirements. We structured the pricing section of the solicitation like a menu in a restaurant. Cost of aircraft operation per hour, fuel, maintenance, standby, and other price elements were specifically covered in the proposed contract.

During our negotiations, we stressed with the Vietnamese contractor that we encouraged use of the helicopters when there was no scheduled search mission. We suggested they contact oil exploration and mining companies that might be interested in using their helicopters, and we gave the contractor the names of companies and points of contact. Although the Vietnamese firm would receive a contract worth \$5 million dollars less than the previous contracts, the opportunity for greater revenue was significantly increased. As further incentive, we suggested that their team come to Singapore for a formal contractsigning ceremony, and eight corporate officials did so. We scheduled a formal luncheon with photo opportunities for the attendees. The ceremony was a great success and was repeated when each option on the contract was exercised.

In conclusion, the importance of understanding culture, history, language, bargaining, and business practices in foreign negotiations cannot be overstated. Advance preparation and awareness of the differences in the non-American environment will lead to success and a win-win outcome for all parties.

Editor's note: The author welcomes comments and questions. He may be contacted at bruno.wengrowski @dau.mil.

The Challenge of Producing Quality Materiel in an Environment of Reform



eginning in the 1990s, in the throes of declining military budgets, the Department of Defense (DoD) embarked on a series of reforms to streamline the military acquisition system. These reforms, known as the Perry Initiatives, involved sweeping cultural changes with the intent of reducing acquisition time and costs. At the core of the change was a major refocus in the way the DoD manages its acquisition programs. This change shifted much of the burden for development and production of weapon systems from the government to the contractor. In the new culture, the government was to provide the contractor with a performance specifica-

tion, and the contractor was to determine how best to develop and produce the item. Streamlining also did much to encourage innovation within the development and acquisition process, which seemed to be entrenched in a myriad of specifications.

The Downside of Acquisition Reform

Acquisition reform had some unintended negative consequences, however, including the elimination or major reduction in the role of the quality discipline on military hardware production programs. During this same time, contractors found themselves in the midst of mergers,

acquisitions, and consolidations. These actions significantly impacted how business was to function, as each company had to redefine its corporate culture and the area in which it would conduct future business. Budget cuts also led to significant changes within the government depot support elements as they found that it would be necessary to increase their business in order to survive. Competing for business was a major cultural change for the depots. They had little experience at the task of building a business base and were not staffed to support such functions. Government program/project offices were also impacted in that reduction-in-force targets were also levied on their operations.

As a result, all were forced to look at their internal operations and eliminate areas that were considered wasteful or non-value added. This is a desirable consequence but is often practiced with short-term goals in mind (focus on today's problems with little or no concern for the future). In addition, many older, experienced workers, including management, retired during this same time period (in some instances as the result of financial incentives) and weren't replaced by younger workers because of budget pressures. Hence, when less experienced workers were eventually hired, there were fewer experienced workers remaining to provide on-the-job training and to pass on lessons learned and legacy corporate/program knowledge. Furthermore, formalized training budgets reflected the overall reduction in spending, and new hires were not properly equipped to support all work planned by management. This personnel problem was further aggravated by the difficulty in hiring persons in an industry highly publicized to be in a state of decline. Lastly, alongside corporate cutbacks, confusion surrounded the nature of the new leadership role for government quality assurance (QA) organizations. Their hallmark surveillance and oversight functions of the past were severely curtailed or, in some instances, eliminated.

Q.A. Suffers

While well-established quality programs may have existed, they were deflected from their traditional practices by major internal business changes, and the quality systems didn't keep pace with the demands that were made on them. The mantra was that quality was inherent to everyone's job. One consequence was the decline of the practice of QA activities and the associated decline in the QA profession in the industry. The presence of extensive local government oversight and direction was viewed to be a significant cost driver. It seemed reasonable, therefore, to place the responsibility for developing materiel in the hands of contractors as long as they understood the performance specifications and were operating with the principles of ISO 9000 quality assurance and quality management standards. Indeed, in an ideal world that conforms to theory, design engineers develop requirementsconforming producible designs, then flaw-free products are made by production organizations without the need for any oversight. However, history has shown that the real world does not conform well to ideals and ultimately reaches a steady-state operating point at its lowest common denominator. Unfortunately, this occurred and largely because many contractor quality organizations still looked to the government for leadership, reinforcement, and a new way of imposing the governing and controlling standards and specifications. Blurring the role of quality by reform initiatives resulted in both government and industry waiting for the other to act.

Outsourcing Creates Issues

Another change in the method of conducting business has been for defense prime contractors to outsource items previously designed and manufactured internally. While this may be more efficient from a cost perspective, the management of many subcontractors further complicated the quality process and compounded the quality problems described above. First, many subcontractors consider their products and processes proprietary and resist outside oversight, whether from the immediate corporate customer or from the government. Their specific designs also are often considered proprietary. Hence, the customer is buying "black boxes" without knowing the contents. In several instances, the use of commercial offthe-shelf (COTS) items was directed by the government as a cost saving measure to provide current technology to the field. In these instances, customers had to rely on the integrity and technical maturity of the subcontractor organizations and the diligence of the system prime contractor to control them. This premise often failed, as the COTS supplier was not receptive to any controls, and product was provided on an as-is/take-it-or-leave-it basis.

For many reasons, contractor oversight and control of subcontractors weren't adequate, and problems resulted on several occasions. For example, vendors made changes to approved and frozen designs without prime contractor or government knowledge or consent, independent of the potential downstream impact of the change. The flow-down of design guidelines and prohibitions required by the system specifications or scopes of work didn't or couldn't take place. This resulted in the inconsistent management of subcontractors, which, in turn led to delivery of nonconforming or non-useable supplies.

Further, contractor organizations didn't place an emphasis on continuous quality improvement. "I meet the requirements of ISO 9000 as demonstrated by my certification," was the attitude. Unfortunately, product and process quality will always be in motion, either in an upward or downward direction, and must be understood and managed for proper control. To further illustrate this issue, metrics used by senior leadership as management indicators had migrated to a level too high to provide sufficient information in a timely manner to indicate prob-

lem areas. While overall company status may appear healthy, specific elements may in fact be in trouble. Neglect of this fact has led to deterioration of product.

Wait and See

All through the turbulence and uncertainty of corporate mergers and the adaptation of standards that did not mirror past government quality practices, government program organizations remained passive. Throughout the period, they shifted their focus from hall-marked surveillance and auditing to wait-and-see, instead of presenting a challenge to industry to demonstrate how quality product was to result. In essence, the dynamics of change impacted everyone. From the initial shift in responsibility for implementing standards at the start, to what were the acceptance requirements at the end, everyone's role was certainly blurred.

A Case in Point: The PATRIOT

The experience of the PATRIOT missile system illustrates the erosion of quality since the beginning of acquisition reform. PATRIOT serves as a good example because it experienced all phases in the acquisition life cycle concurrently (i.e. PATRIOT had fielded legacy elements as well as portions in research and development (R&D) and production.) In the 1990s, after Operation Desert Storm, the PATRIOT system underwent a major product improvement that was subject to the full impact of acquisition reform: development and purchase of upgrades to the PATRIOT ground

hardware, including spare parts; development and production of the PATRIOT Advanced Capability-3 (PAC-3) Hit-to-Kill Missile; and refurbishment activities for legacy PATRIOT Missiles. All prime contractors and one government depot support element involved in these programs were examined. All three organizations had established ISO 9000-certified quality management systems.

Documents prepared by each of these three organizations from August 2002 to the present were analyzed. The purpose of the analysis was to determine whether any common threads existed among the organizations that might cause the quality issues being experienced. The analysis process included steps to determine what caused specific problems and how the problems were managed. The documents dealt with specific quality issues that were identified by various Aviation and Missile Command (AMCOM) and contractor organizations. The sidebar at the top of the next column summarizes the issues and the specific quality fundamentals violated or diminished.

Systemic Quality Issues Impacting PATRIOT Systems

Quality Fundamental Violation

Policy, Planning, and Management

- Defines and enforces quality policy and objectives
- Evaluates quality metrics

Design Assurance and Design Change Control

- Identifies document and flow design input requirements
- Systems engineering process not properly practiced/utilized

Quality policy and planning not kept current

with business environment

Change in metrics resulting from

growth/change in base business

Control of Purchased Materiel

- Verifies the flow-down of requirements and instructions to subcontractors and vendors
- Self-inspection/audit programs not properly implemented
- Improper use or lack of use of statistical signals of problems
- Dock-to-stock programs resulted in production stoppages, material purges, and field failures

Production Quality Control

- Assures the control of manufactuning through inspection, testing, and metrics
- Self-inspection/self-audit programs improperly implemented and managed
- Top management visibility clouded

Corrective/Preventive Action

- Investigates the root cause of nonconforming product
- Develops actions to prevent recurrence

Improper management or lack of an efficient e of closed-loop root cause corrective action sys-

- Employee Training, Certification, & Motivation
- Verifies that employees are properly trained
- Improper management of resources.
- Ripple effect to workforce of government and industry reductions in Force

The actual incidents recorded ranged from missing hardware, to foreign object debris, to not following documented manufacturing and quality procedures. Numerous failures escaped the manufacturing facilities and were found in the field. In fact, the manufacturing line was completely emptied of a particular part in order to support ongoing field activities. It is interesting to note that none of the problems observed was a high-technology problem. Relatively fundamental documentation or process miscues created problems with low-technology items. Taken as a whole, though, they are indicative of something systemic in nature. That is, each of the miscues could have been avoided had there been a management commitment to continuous process improvement and had fundamental principles of quality assurance been practiced. None of these issues, in isolation, would be earth shattering; however, in the aggregate, they are alarming and unacceptable.

When the specific problem areas were examined, several common threads emerged. They are the underlying causes

and must be dealt with in order to truly improve product quality and not merely fix problems with stop-gap solutions:

Management inattention and indifference

- Lack of focus on true root cause but focus instead on the immediate, shortterm corrective action
- No or ineffective internal auditing
- Non-closed-loop corrective action system
- Inadequate company quality policies or failure to enforce policies
- Lack of quality control director equal with other discipline's directors

Lack of information transfer

- Inadequate requirements flow-down
- Inadequate documentation flow-down
- Inadequate work instructions
- Inadequate technical data packages/manufacturing data packages
- Inadequate or lack of training
- Ineffective quality metrics
- Lack of Vendor/Subcontractor oversight/con-
- Lack of commitment to continuous improvement
- Departure from sound fundamental quality/product assurance principles.

The common threads above are symptomatic indications that the strong government program office of the past, with its clearly defined responsibilities, no longer held current operating agents (contractors, depots, and government organizations) accountable. This led to the many manifestations of quality decline that have been seen.

Future Solutions

The major changes in the acquisition culture, combined with the degradation of quality and quality management systems, have been a slow migration. While there were no direct acts on the part of government or contractor management to minimize the importance of quality, it has occurred nonetheless. Though varying in extent, every fundamental element of QA has been violated.

> Fortunately, the problem is being turned around. Operation and materiel quality is improving. Innovation and efficiencies are encouraged while product quality is maintained. Every prob-

lem area is being examined to determine what in the acquisition culture has allowed such quality deficiencies. Government and contractor alike have committed to do whatever it takes to ensure that deliveries meet requirements. Initiatives made by the government

to meet these challenges include intense review of product failures to ensure

identification of root cause and the implementation of robust corrective action and restoration of quality. In essence, the fundamentals of quality have been reinstated in the contractors' and depots' development and production processes.

A number of activities that have been shown fruitful in assuring root cause and robust corrective actions:

- Strong executive leadership involvement
- Strong day-to-day participation by the government and contractor QA function in the integrated product team (IPT) process
- Strong emphasis in the IPT process on failure review board and root cause and corrective action activities
- Integration of the government quality assurance function in the identification and resolution of quality and manufacturing systems
- Return to the practice of the systems engineering process and sound fundamentals of quality and manufacturing.

Other solutions emphasize a back-to-basics approach. Continuous improvement and reduction in defects are being emphasized as part of the quality program. Contractors are establishing, re-establishing, or confirming proper documentation baselines for the entire technical and manufacturing data packages. Contractors and government depots have reinvigorated the root cause analysis process leading to proper corrective actions. The elimination of root causes is focusing beyond the immediate technical solution into the culture that encouraged the technical problems in the first place. In other words, the failing within the culture that fostered or encouraged the quality escape is being identified and corrective action is applied as necessary. In all cases below, executive-level sponsorship is now demonstrated.

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Management inattention and indifference

- Encouraged manufacturing employees to stop what they were doing, and to identify, fix, and prevent problems as early as possible
- Initiated stop-gap corrective actions to prevent escapes
- Maximized ship-readiness and preventative actions
- Emphasized continuous improvement, control, and sustainment.

Lack of information transfer

- Demanded a quality first mindset from all personnel
- Initiated intensive employee training programs sponsored by senior executives
- Identified failure of corrective action systems (i.e. ineffective or lack of root cause identification)
- Restructured/re-energized the Corrective Action Board with senior management participation mandatory
- Took corrective and preventative action for all quality indicator findings rather than reviewing only the metrics that did not meet a set goal.

Ineffective quality metrics

Instituted improved measurement and reporting system of quality performance indicators with bottoms-up instead of top-down review at every level.

Lack of Vendor/Subcontractor oversight/control

- Reassessed/revised supplier practices and ground rules
- Identified and assessed program-significant suppliers

Lack of commitment to continuous improvement

- Reasserted commitment to continuous improvement
- Took proactive approach to problem solving
- Focused on setting clear goals and correcting systemic issues to improve process performance and product quality.

Departure from sound fundamental quality/product assurance principles

- Developed policy, performed planning, and provided management attention
- Provided adequate and proactive design assurance and design control
- Instituted control of purchased materiel
- Introduced proactive production quality control
- Performed root cause/corrective action
- Provided employee training, certification, and motivation.

Government, depot, and industry managers are now committed to continuous quality improvement in an atmosphere where cultural barriers have been broken down, so all members of the organization function as a team and remain true to the fundamentals of quality assurance as an overriding purpose. This new teamwork between government and industry was, in fact, the hallmark of the



original acquisition reform. The lesson learned is that all government and contractor employees are empowered to contribute to continuous quality improvement to ensure that deliveries meet requirements. The government and contractor project team is committed to the fact that quality and reliability must be planned for and appropriately budgeted; they cannot be bargaining chips and their levels cannot be compromised. Regardless of the quality system implemented or the acquisition policies in place, a sound quality and manufacturing system is based on sound fundamentals. These fundamentals are proven and do not change. When compromises are made to fundamentals, the resultant system will not succeed.

Editor's note: The author welcomes comments and questions and can be contacted at pat.renegar@cas-inc.com. The author acknowledges contributions to this article from the following: Army Lt. Col. Barry G. Manning and Michael R. Whitt, Lower Tier Project Office; and Steven Junkins, CAS, Inc.

Management Fad of the Month ... Can They All Work?

Wayne Turk

o you've heard about the latest and greatest management fad—a management concept, practice, tool, style, or whatever. It's something that's "guaranteed" to make your organization a success: to increase productivity, raise morale, lower turnover, increase profits, and solve your organization's problems. Your question is "Will it work for me?" The answer's easy: "Yes, no, maybe, or temporarily."

That answer doesn't help, you say? Well, let's look a little deeper.

What is a management fad? I do not use the term pejoratively. Webster defines *management* as "judicious use of means to accomplish an end" and *fad* as "a practice followed for a time with exaggerated zeal." If we put them together, we get "the use of a practice followed for a time with exaggerated zeal as a means to accomplish an end." Maybe we should take out "exaggerated" to make the definition more useful.

Now that we know what they are, why are management fads so popular? That's an even easier question to answer. Managers at every level have problems and are looking for an easy way to solve them. And that is exactly what the experts promise with each new management fad.

Reach back into your storehouse of memories. If you have been around for a while, you will remember some or all of these: management by objectives; theory X/theory Y/theory Z; total quality management; quality circles; knowledge management; business process reengineering; balanced scorecard; 360-degree reviews; integrated product teams; cross functional working groups; or any

Managers at every level have problems and are looking for an easy way to solve them. And that is exactly what the experts promise with each new management fad.

of a dozen others. Many are still around and you are probably using one or more of them. I hope so. Why do I say that? Because they *can* work, and each and every one of them *will* work if implemented and used correctly.

The Life Cycle of the Management Fad

We need to step back for a moment and look at how a management fad is born, matures, and sometimes dies. It starts with a manager who intuitively tries something that works, or with an academic who has a theory. He or she then refines that concept and puts it into practice. Call this stage a pilot. The results are spectacular. Another

Turk is a retired Air Force lieutenant colonel and a senior member of the professional staff of SRA International, where he supports the National Guard Bureau as an IT Project Manager.

try, and more impressive results. Our inventor wants to share the concept with others so that all can benefit (and if there's a buck to be made from it, even better).

So he or she—and converts made along the way pool their ideas and examples of those stunning results. They present classes or seminars for others to learn about this revolutionary practice and what it can do for an organization. The students of these classes or seminars (at least some of them) become advocates or champions of the practice. They have paid their money, heard the pitch, and seen the reported results. They become true believers who proselytize and spread the word. They implement the practice in their organizations, and some, if not most, have some immediate success. As word of these successes spreads, more join in.

But soon the pattern changes and successes are not as spectacular or as frequent. The original converts lose interest and their advocacy pales, not necessarily because they no longer believe, but because they become focused on other problems. Then the concept coasts along, in place in some organizations and dropped by others. Eventually many fade away except for isolated examples. Some, or parts of some, remain in use because they continue to work.

Some Come, Some Go ... and Some Stick Around

Why does the management fad work sometimes and not others? Why does it fade away if it works? Now we are getting into harder questions, but the answers to both are basically the same: It is a matter of advocacy, commitment, attention, metrics (or lack of metrics), communication, and involvement.

Looking at the various stakeholders, we naturally see different perspectives. At the upper management level, there are problems to be solved. There is no panacea for all of an organization's ills, but upper management is usually willing to listen to claims of one. Therefore, when a champion for a new and different practice, concept or tool comes along, all excited and gushing over a new and better way to solve the most pressing problem—maybe even all problems—there's a receptive audience. The organization may have tried one or more fads before, but the old champions of those other fads have usually lost their enthusiasm or may be focused on something else, so the cycle begins again. In some cases, there is not a new fad to replace the old one: there is just a loss of interest or focus. Without upper level management interest, advo-

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cacy, and true commitment, the fad dies a slow death in the organization.

Middle management is focused on the everyday mission and the problems that must be solved to get the job done. They do not believe that they can focus their

attention on multiple fads and still have mission success. They worry that implementation and management of any fad will take too much time, energy, or resources, and may take too much away from their primary work. This is especially true if they have been down the road of new-and-better too many times before. Seasoned managers have seen fads come and go. Most still play the game and will support a new fad espoused by upper management (on the surface anyway). Without their full attention and involvement, though, the spectacular results will not be there. In fact, lukewarm support may be worse than no support because it sends conflicting messages to the worker level. In the cases where middle management only provides nominal support, the fad will usually show little success and fade away, sometimes fairly quickly.

Measurement, Involvement are Key

Speaking of results, that leads us to metrics and the measurement of results. Metrics are both difficult and critical. Defining and identifying good metrics are very hard, as well as potentially time consuming and expensive. To be useful, metrics must be quantifiable, measurable, and limited, in both scope and number. They must measure things



that are controllable. There are many good guides on defining and using metrics out there. This article will not try to get into how and when to use them or even what makes a good metric.

What managers must remember, though, is that what is measured becomes what is important—both to management and the employees. They must remember, too, that when you measure something, you influence it, so you have to measure the *right* things or your metrics can lead you astray. Feedback on the results to all involved is also necessary. "All involved" means both up the chain to upper management and down the chain to the employees. If people can't see measurable results, they don't know whether their efforts were worthwhile, and interest wanes. The lack of good metrics and the non-use of the information from the metrics are two more reasons that many management fads fail over the long run.

This brings us to involvement and the Hawthorne Effect. Most managers know about the Hawthorne Effect and have studied it in college or a management class. The name comes from some early work on organizational measurement, conducted between 1927 and 1932, at the Western Electric plant in Hawthorne, Ill., where management tried to determine optimum levels of factoryfloor lighting and the results of other changes. Because the employees knew about the study and felt some ownership, they responded to each adjustment by increasing productivity. It has been proved again and again that employees respond to attention, even negative attention. If they feel involved, a part of the team, then their productivity is higher and their morale is better. The bottom line is that they work harder because they feel that someone cares about them.

What's in it for You?

What does all of this mean for today's managers? Well, for one thing, it means that any management fad will work if you do it right. Even negative management styles

can work ... for a while. They are not good for long-term success, however. Any of the positive practices can provide outstanding results and these results can be sustained. For that, we need to go back to the original definition, "the use of a practice followed for a time with zeal as a means to accomplish an end." If a manager truly believes in a management fad (whatever it is), can

communicate that zeal to the employees, and can make sure that they are involved and feel a part of what is happening—it will work. For continued success, employee involvement is critical. That was a large part of the early successes of concepts like management by objectives, quality circles, and business process reengineering. Employees at the working level were a large part of each of those. One of the reasons that each faded out or lost its popularity was that managers lost their zeal, and employees no longer felt a part of what was happening. Each concept frequently became a facade or sham. It was back to business as usual after a time, with only the vestiges of the concepts remaining. That does not have to happen. By keeping employees involved, aware of the importance of what is happening, and giving them feedback on the results, sustained improvement is possible, if not inevitable. That is the job of the manager. Maintaining zeal can be tough; so can finding the time to share information with the employees. But both are vital to the manager's success. Without enthusiasm and communication, success (if there is any) is usually doomed for anything other than the short term.

Pick and Choose, Mix and Match

You say that all of this sounds good, but what does it really mean for the manager? It means that you, the manager, can be a shining star—but it requires work. Decide which fad or concept you believe will work. Or even better, pick and choose the best parts of more than one. That means doing some research. Read the professional journals and the popular press. See what's out there. Analyze what you find. Take it apart and put it together again. There is no rule that says that you can't mix and match parts of multiple concepts or even modify them to match your organization's needs or your personal style. Develop your own, but keep those under you involved. Give the employees some ownership. Share what you are trying to do and why. Then stick with it. A short trial may not be enough. Give it time to work, time to become institutionalized. Develop good metrics and use the information that the metrics provide to make changes. Share that information up and down the chain. Maintain your enthusiasm. Communicate it to the troops. Make them believe. The employees are the real basis of success. Do these things and your choice of fads will pay off in the end—for you and for your organization.

Editor's note: The author welcomes comments and questions. Contact him at Wayne_Turk@sra.com.

Heroes II: Attack Of The Process Clones

Capt. Chris Quaid, USAF ■ Capt. Dan Ward, USAF



recurring theme in Spiderman comics is newspaper editor J. Jonah Jameson's animosity toward the webslinger. Even though Spidey is a bona fide hero with a solid track record of saving the girl, the city, and the day, Mr. Jameson is determined to unmask and discredit him.

Since even comic book heroes can be polarizing, the divided response to our "Heroics" article (*Program Manager*, September-December 2003) shouldn't have been a surprise. Still, the volume of e-mail we received on this article exceeded any of our previous writing efforts, with readers expressing strong feelings on both ends of the spectrum.

To those who loved the article, we thank you and hope you enjoy this one too. To those who were less than enamored—let's try again.

Heroism: One Word, Too Many Definitions

Our first article was a response to the negative connotations many people assign to heroism-related words, and most of the objections we received reflected that negative perspective. That's unfortunate, since "hero" and "heroine" are perfectly fine words that can be used to de-

scribe a person who performs admirably, who inspires people, and who is worthy of respect. Indeed, that's how we intended the word to be understood.

Apparently, not everyone accepts that definition. One reader described heroes as people who simply clean up messes they made in the first place. Given the percentage of people who don't clean up their own messes, that type of hero may not be so bad, but we agree that simply fixing a problem you caused isn't exactly optimal behavior. Real heroes also fix problems they *didn't* cause, and we contend their contribution to an organization is a net gain.

Other correspondents seemed to think heroism is defined by working long hours—a serious misunderstanding. Heroes are focused on producing results, and work hours are not a result—they are a *means* to a result. Some people work long hours because they are slow, inefficient, or reluctant to go home for any number of reasons. Real heroes often produce results without spending all day doing it. Their well-honed skills and ability to empower others to assist, along with their superhuman strength, may create the illusion of ease, particularly if they work quickly. But make no mistake: when you see a hero do the im-

Our heroes work for the National Geospatial-Intelligence Agency. Quaid is assigned to NGA's Technical Executive Office, and Ward is an InnoVisioneer in the Intelligence Integration Office.

possible in record time without breaking a sweat, you are watching a master at work. Simply working late on a regular basis or struggling and sweating a lot is something less than heroic.

Heroism and Process: Sworn Enemies?

The most frequent misunderstanding was based on the idea that heroics and process are mutually exclusive. In fact, a program manager needs both, and our point was that heroes and heroines are ignored or disparaged at the PM's peril. PMs need a healthy respect and deep understanding of the role both types play.

A few readers offered anecdotal evidence of situations where process replaced heroics, much to the benefit of the corporate bottom line. It is tempting to reply with even more anecdotes of successful heroes, but arguing by anecdote is not, ultimately, a convincing approach. And in fact, when an individual finds a way to make the process work, that individual may indeed be ... a hero.

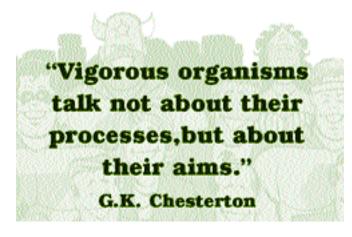
Retired Hallmark creativity guru Gordon MacKenzie's 1996 book *Orbiting the Giant Hairball* is practically a how-to guide to heroics. More accurately, it is a *why-*to. MacKenzie explains that in many process-oriented organizations, "intricate patterns of effective behavior have grown around lessons of success and failure, creating a Gordian Knot of Corporate Normalcy." He goes on to point out that the problem is, "Corporate Normalcy derives from and is dedicated to past realities and past successes. There is no room ... for original thinking or primary creativity."

If all we have is process, how can we ever do anything new? Please don't think process can produce truly creative results because you simply can't get there from here.

MacKenzie advocates seeking a balance between Corporate Normalcy (process) and dynamic creativity (heroism), where a person is able to occasionally operate "beyond accepted models, patterns or standards—all while remaining connected to the spirit of the corporate mission." The individual needs to respect and be part of the corporate organization because it contains the mission and purpose for the work, but individuals also need to be free to be "appropriately inappropriate" when the situation warrants it. This type of courageous creativity is an important component of heroism.

What's Wrong With Process?

It would be silly to say processes are always bad. Indeed, our original article pointed out that "repeatable, well-documented, robust processes have value." However, an undue focus on process may 1) create a false sense of security, since no process is perfect; 2) decrease an organization's ability to respond to unexpected developments; and 3) shift the focus away from results. Heroes address all three issues. This is not to say every focus on process



is undue or extreme, but relying *solely* on process and ignoring (or disparaging) heroics is just as much a symptom of bad management as relying on heroes completely. Our first article explained that heroics are sometimes an indication of dysfunctional management, a point worth repeating here. However, we believe procedural homogeneity leads to a false, illusory comfort that in turn leads to stagnation and apathy, while heroics keep things honest, lively, and effective.

Process is all about repeatability and adherence to standards. Those are important components of organizational behavior and achievement, but they aren't the whole story. Process is singularly ill-suited to doing something new, creative, or unanticipated. Process is designed to propagate yesterday's success rather than craft tomorrow's breakthrough. Process also tends to be failure-averse, which is not always a good thing. In an attempt to prevent mistakes, a strict focus on process may inadvertently prevent learning, growth, and opportunity. As former CEO Rondalyn Varney Whitney observed, failure is the only way to measure maximum performance, so our organizations need to allow room for failure with an understanding that the opportunity gained will far exceed the damage that could occur. This is something most processes don't address.

One other problem with a myopic focus on process is that it removes individual responsibility. If a person follows a process and things go badly (which even the most rabid process advocates must admit happens occasionally), the process is clearly to blame. Similarly, if things go well, the individual earns relatively little credit—after all, the process saved the day. Thus there is not much personal accountability and little sense of personal commitment if everything is based on following a process, and that is a problem. It leads to apathy, boredom, frustration, and a number of other atmospheric poisons.

Because heroes, in contrast, are mindfully engaged in determining their path, they are directly accountable for

Continued on page 51

STANDARD Missile Value Engineering (VE) Program

A Best Practices Role Model

Roland Blocksom

n mid 2002, the Office of Naval Research's Best Manufacturing Practices Center of Excellence (BMPCOE) reported a survey of best practices being used in the Navy's STANDARD Missile Program Office, currently a part of the Surface Weapons Systems/Launchers division of the Program Executive Office for Integrated Warfare Systems (PEO IWS 3A).

One of the areas highlighted in the STANDARD Missile Program Office survey was its use of a Value Engineering (VE) program that implements a highly successful VE change process with its STANDARD Missile production lines. The nominal return-on-investment (ROI) from the VE program was substantial when compared to others in the federal government.

This article recounts how the VE program arose, was nurtured in a team environment, and was implemented. It points to a number of lessons learned that have earned this program the label of "best practice" and illustrates why the Navy's STANDARD Missile Program Office has become a role model for similar VE programs in industry and government.

Tough Defense Budget Years Pose Missile Affordability Problems

By the mid 1990s, defense budget cutbacks—as much as 40 percent—were beginning to have a major impact on many government weapon procurement efforts. At the same time, mandated acquisition reform changes were beginning to be implemented within the Department of Defense (DoD). These reforms were intended to transform DoD into a more responsive and efficient buyer of best-value goods and services by focusing on a number of critical issues that included establishing total ownership cost reduction discipline and bringing cost engineering tools into play.

At the grass roots level, officials in the Navy's STANDARD Missile Program Office were beginning to see the unit price of missiles increase as the defense budgets de-



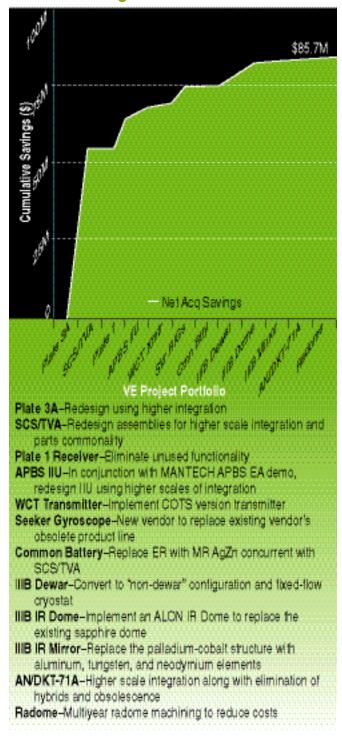
creased, yet they saw little change in the requirement for providing air defense missiles to the U.S. Navy Fleet.

Program Office Initiative Gets The VE Change Proposal (VECP) Process Rolling

By addressing missile unit cost reduction as a total ownership cost goal, the program office began designating cost as part of their engineering discipline. Program office leaders empowered an integrated product team (IPT) to work on three areas where they thought missile cost could be controlled: production, development, and lo-

Blocksom is a retired Navy commander and currently a technical risk manager with WILLCOR, Inc., supporting the Navy's Best Manufacturing Practices Center of Excellence (BMPCOE).

Budget Savings from the STANDARD Missile VE Program



gistics support. Of these three areas, production buys seemed to be the major cost driver. The team also concentrated on having the capability to trade performance for cost, as well as considering cost as a goal in evaluating new technology for the missile program. Realizing that engineering change was an integral and normative part of the acquisition process, the program office considered a strategy for using engineering changes as a cost

reduction tool in missile production lines. The leaders reasoned that by establishing incentive in this process, both the government and its industry partners would benefit. They also reasoned that incremental performance improvements in block upgrades would reduce program risks, testing costs, and qualification requirements. At the same time, streamlining the process by relaxing detailed design control with the prime contractor would simplify the change process and help accomplish acquisition reform goals. The results of these strategy considerations became a highly successful VE change proposal (VECP) process—so successful, in fact, that the program office was able to save over \$85 million through FY03, establishing the STANDARD Missile Program as a leader in federal VE efforts.

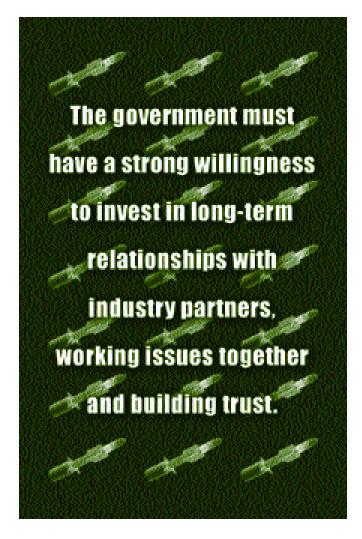
Flushing Out Successful Strategies for VECPs

The program office was faced with how to structure successful VECP strategies that were realistic and achievable from both a technical and a contracting process perspective. The program office determined that the most important strategies were to make optimum use of personnel resources, to streamline the procurement process, and to ensure well-designed technical improvements.

To optimize personnel resources, the program office focused on the important benefits that could be derived from a good government/industry partnering. This involved not only getting the program office and field activities to work together, but also integrating the contractor, Raytheon, into the team as a full partner. To streamline procurement, the program office ensured that the VECP process/approval cycle was well defined and understood at the start. In the technical arena, the program office had to consider a number of development/production impacts resulting from the potential VECPs.

Optimizing Development and Production Capabilities

VECPs are engineering changes to an existing design. The value part of the engineering change is any technical, material, or support change that has been proposed to the design to obtain its cost and performance value. The technical changes that the STANDARD Missile Program Office considered for missiles in production included replacing obsolete parts, designing changes for both new and backfitted missiles, and missile performance enhancements. Technical considerations also had to be made for ensuring the continued use of manufacturing sources, testability, incorporation of new technology enhancements, improved reliability, and commonality with other missile variants in production. These technical considerations were aided by design strategies that included not only product architectures across the STANDARD Missile family, re-use of proven designs, and controlled parts selections, but also considerations for use and mission applications by 13 foreign military sales (FMS) countries.



Government and Industry Partnering: A Win/Win Deal

According to Scott Reiter, then production manager for the STANDARD Missile Program Office, the key to achieving cost reductions using the VECP process was the concept of close government/industry partnering. Reiter emphasizes that the government must have a strong willingness to invest in long-term relationships with industry partners, working issues together and building trust. He cautions, however, that doing this doesn't mean giving away the store. Once the process was initiated, ideas for VECPs began to generate excitement as the process matured and showed return on investment. Reiter states that the government just couldn't have afforded the burden of going down this path by itself. Rich Leonard, the Raytheon business manager for STANDARD Missile Programs, agrees completely, saying that "the success of the VECP program has in large part been due to the close partnership Raytheon has had with NAVSEA [Naval Sea Systems Command] during the program."

A Streamlined VECP Process

Structuring and controlling the VECP process was one of the keys to success. Written ground rules and streamlining the approval chain and contracting process were extremely important. Nailing down share lines and agreeing with the prime contractor on contractual details were critical. Cost goals included splitting the share line 50/50 for a specified number of years, then structuring incentives for cost savings. The government didn't want to get into a share line negotiation cycle. Both the government and the contractor had a win/win situation.

Raytheon agrees that maintaining a formal process was key to the success of the partnership. Leonard comments that the communication of project process and expectations in the early stages of the VECP process was critical.

Program office relationships with the contracting officer were also a necessary part of the VECP process, according to Reiter. The contracting officer had to be on board with the details and not be a stumbling block to the process implementation, yet ensure that all the i's were dotted and t's crossed from a regulatory standpoint. The approval process needed to be streamlined but auditable. The timeline activities in the VECP process (proposal development, selection board cycle, contracting procedures, for example) had to be well known to all players. Cost proposals needed to be clear and able to be put under contract quickly .

Elements in the Structure of a Good VECP

A long, mature production line had already been established and was operating for the STANDARD Missile. When VE incentives were announced, it was not difficult for contractor personnel to produce viable VECP candidates. Ideas for VECPs were abundant. However, to be a good VECP candidate and a benefit to the Navy, the terms of cost savings and performance enhancement had to be well articulated, the engineering impacts had to be known at the beginning, and production schedules had to be well-managed to minimize overall cost impacts in the budgeting and contracting processes. Each of these elements required considerable organization as well as the formulation of metrics by which to evaluate the effort's success.

Referring to the importance of handling personnel resources in a successful VECP process, Leonard says, "We have been able to retain some of the most respected engineers within our division on STANDARD." He further notes that when mature programs don't offer such challenges as the successful STANDARD Missile VECP program, the project tends to lose critical engineering and operations personnel to new and more exciting programs.

The Metrics Tell the Story

Over the course of several years, the STANDARD Missile Program Office VE IPT evaluated many ideas for all the major subsystems of the STANDARD Missile. They ranged in scope from component/unit redesign and modified

STANDARD Missile



he STANDARD Missile is among the most reliable and effective weapon systems in the Department of the Navy's tactical inventory. It offers primary air defense support for the AEGIS Ticonderoga-class cruisers, the Arleigh Burke-class destroyers, and the navies of allied countries throughout the world. The evolving STANDARD Missile family provides a robust anti-air warfare capability—a defense against high altitude, longrange, high crossing, and maneuvering threats. The STANDARD Missile Program Office (IWS 3A) is responsible for the cradle-to-grave management of the STANDARD Missile. IWS 3A oversees all variants of the program, inclusive of concept formulation, design, development, integration, acquisition, test and evaluation, fleet introduction, modernization, and life-cycle maintenance. Photograph courtesy of BMPCOE

production processes to commercial off-the-shelf (COTS) implementation and new vendor selection to address parts obsolescence issues. The cost reduction in individual VECPs ranged from \$ 0.5 million to over \$56 million. The chart on page 42 shows the VECP portfolio through FY03 illustrating the net reduction for the STANDARD Missile Program acquisitions.

Examples of Successful VECP Implementation

Three examples of successful STANDARD Missile VECPs tell the story: the Plate 3A AEGIS Transceiver Producibility VECP; the Warhead Compatible Telemeter (WCT) Transmitter (AN/DKT-71A); and the Autopilot Battery Section Inertial Instrument Unit and Electronics Assemblies (APBS IIU and APBS EA). But first, a few words are needed to understand these changes in terms of the weapon in which they were implemented. The STANDARD Missile, the Navy's premier surface-to-air, ship-based weapon, is a highly complex system composed of multiple modules, some of which control evolutions such as guidance and navigation, propulsion, staging, steering control, and warhead control. Module interfaces are highly defined, and module/component design is tightly controlled to produce this extremely compact and complex weapon. In addition, members of the STANDARD Missile family are usually variants of a well-honed design process that is upgraded in blocks and increments to add new performance capabilities or missile functionality. These features mean that any change to a missile variant can ripple through the production lines to other variants.

VECP Example #1: Plate 3A AEGIS Transceiver Assembly

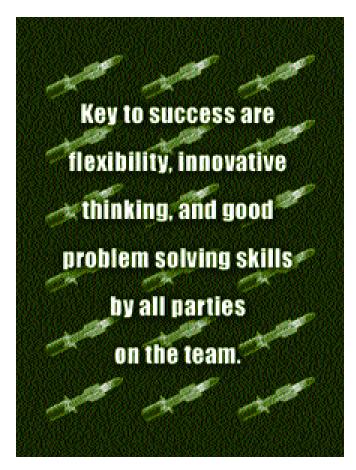
The design link allowing communication from the missile to the AEGIS weapons system, implemented in the Navy's CG-47 *Ticonderoga* and DDG-51 *Arleigh Burke* cruiser and destroyer ship classes, was modified to include a higher component level of integration. The results of the modifications added new functionality, link sensitivity, improved reliability, nuclear hardening, and other performance enhancements. The higher scale integration implementation directly reduced the number of testable assembly test levels from 11 to seven. The overall contract saved the government \$34 million in immediate and projected procurement costs.

VECP Example #2: Warhead Compatible Telemeter (WCT) Transmitter (AN/DKT-71A)

The AN/DKT-71A Warhead Compatible Telemeter Transmitter that controls telemetry signals to the warhead was a unique military design. The VECP for this assembly was replaced by a COTS transmitter that met or exceeded the performance capabilities required. The VECP eliminated hybrid designs and obsolete parts to improve performance. Implementing this type of change illustrates to the contractor the value of stipulating performance goals and not design. The VECP has saved over \$3.6 million.

VCEP Example #3: Autopilot Battery Section Inertial Instrument Unit (APBS IIU) and Electronics Assemblies (EAs)

This VECP leveraged two APBS IIU efforts to save costs and time. The VECP facilitated an upgrade to the IIU in conjunction with funding from a Navy manufacturing



technology program demonstration on the APBS electronics assembly (APBS EA). The higher level of electronics integration implemented on the EA allowed a redesign of the inertial instrument unit improving overall missile reliability and commonality over the missile product line. The resulting savings from the government/Raytheon shared investments were about \$50 million.

Lessons Learned from the VECP Process

The major lessons learned from the VECP work accomplished by the daring and innovative personnel of the Navy's STANDARD Missile organization and its prime missile contractor, Raytheon, are recognized as examples of acquisition best practices. Their implementation presents the program office's success as a best practices role model. The lessons are not rocket science, nor are they difficult to implement. They are merely wise implementation of time-tested and logical steps and processes that management can take to ensure that innovative and resourceful people deliver high-quality products to the military user on time and within budget. These lessons also reflect the implementation of the principles embodied in total ownership cost and good risk management techniques.

Government/Industry Partnering Fosters a Win/Win Situation

The successful VECP work carried out by the STANDARD Missile Program Office and Raytheon was a direct result

of conscious decisions to build a government/industry partnering relationship. Both partners were willing to trust each other, to jointly invest their resources, and to commit to a long-term relationship whose keystone was the ability to jointly solve problems. The Navy's STANDARD Missile Program Office and Raytheon were, and continue to be, able to achieve this partnership.

Incentives are Good for Performance

A contract forms a basis for expectations and compensation. As dictated by the Federal Acquisition Regulation (FAR), contracts between the government and industry that exceed \$100,000 must contain VE clauses for possible use when the contract is executed. However, if the government does not play a major role in motivating the contractor, the VE clause provisions may never be exercised. The government must take the initiative. Once implemented, the incentives attract the best performance from the personnel.

Write Down the Ground Rules

If the VECP process is to work smoothly, ground rules must be written early. Written expectations help the parties focus on how share lines will be structured, what investments are required by each party, how cost proposals are to be written and evaluated, how the approval process will proceed, and other key expectations and procedures. The Navy recognized at the beginning that they did not want to play games with share line negotiations and that good work warranted reward. The latter was well-recognized by the contractor as a good thing, and the result became a win/win situation. Knowing how to structure an effective proposal and having the process streamlined helps to get the program on the road.

Change is Continuous: Be Flexible

Even though long-term relationships exist, people, organizations, and processes change. The best practices business models developed for VECPs must be flexible enough to address these inevitable changes. Key to success are flexibility, innovative thinking, and good problem-solving skills by all parties on the team. Sometimes efforts just don't succeed, and return on investment is sometimes hard to predict. In all these efforts Scott Reiter cautions, "Stay away from the blame game."

A Role Model for Others

Through its highly successful and innovative Value Engineering Program, the STANDARD Missile Program Office has implemented the spirit and letter of Public Law 104-106 in "improving performance, reliability, quality, safety, and life cycle costs" and has distinguished itself as a role model and best practices leader in the federal government.

Editor's note: The author welcomes questions and comments. Contact him at roland@bmpcoe.org.

The Art of the Article

How To Write Words and Influence People

Capt. Dan Ward, USAF

t was bound to happen eventually. I predicted it some time ago, but I wasn't expecting it to happen so soon. And yet, after writing 11 articles about program management for this magazine and its predecessor, I suddenly find myself writing about—writing. Specifically, I want to offer a challenge, some encouragement, and a little advice for program managers who want to get published. I particularly hope it will be helpful to all the lieutenants and captains out there; although, of course, everyone is invited to join in the fun.

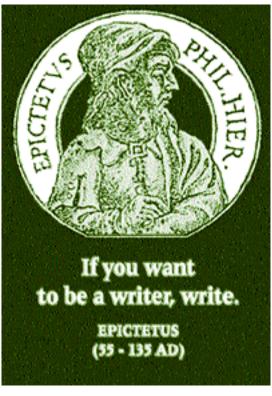
Have Something To Say

Let's get right down to it: if you are going to write, you need to have something to say, preferably something interesting. That

should go without saying, but apparently some people need to be told. How do you find something interesting to say? Well, the cliché advice to new writers is to "write what you know," and that's not a bad place to start. The other option is to write about things you *don't* know. An article can be a great forum for exploring a new topic or issue, and in the process of learning something new, you might produce something worth sharing with the rest of us.

In either case, whether writing from what you know or from what you don't know, make sure you keep it relevant to your audience's interests and needs. There ought to be within your article some new contribution that helps, illuminates, educates, or challenges your readers. Don't write simply to be published, but to be read. Before putting

As well as being Defense AT&L's most prolific author, Ward is an InnoVisioneer with the InnoVision Directorate of the National Geospatial-Intelligence Agency. He holds degrees in electrical engineering and engineering management, and is Level III certified in SPRDE, Level I in PM, T&E, and IT.



pen to paper (or fingers to keyboard), ask whether anyone else will care. Fortunately, if you care, chances are pretty good someone else will too.

If you are still stuck for a topic, the "curse method" may help generate ideas. This approach involves watching for instances of people cursing or complaining. Inevitably, the root of that complaint will be a problem begging for a solution. Bam!—there's your article idea. Just describe the problem and propose a way to address it, in an interesting as well as relevant manner.

One more thing: try fresh approaches. For instance, your story will be more interesting if your logic is surprising, not obvious. Start your readers down a familiar path, then take a new twist.

Do your homework beforehand, read up on a particular topic, then respond with a new, unique perspective. Unless of course you want to be boring and predictable—but that likely won't get you published.

... And Say It Well

As the French poet Stéphane Mallarmé observed, "You don't make a poem with ideas, but with words." The same is true of articles in *Defense AT&L* and elsewhere. Once you've selected your topic and sketched out the idea, you will be faced with the slightly daunting task of actually producing 2,000 words, more or less. That's where the real work begins. You've got to come up with some actual *bons mots*, making sure they are as *bons* as possible.

If you want to write well, start by reading well. Truth is, the more you read, the better you'll write. Exposing yourself to good writers helps establish a sense of what good writing looks and sounds like. And speaking of exposure, make sure someone reads your article before you submit it to an editor. Better yet, find a small crew of trusted reviewers who will give *honest* feedback about the quality,

readability and overall value of your work. It's not easy, so search for those who will tell you what's wrong with your article, not simply what's good.

Even a brilliant concept can be destroyed by poor execution, so as you write, keep it tight (and make it rhyme ... some of the time). Pay close attention to syntax, grammar, and word choice; and get some help if you need it. (We all do from time to time). Put words on paper, lots of words, and don't be afraid if they don't sound quite right at first, because you can always edit them later. Once you've got something to work with, ruthlessly delete the unnecessary, irrelevant, and re-

dundant bits. George Orwell advised writers, "If it is possible to cut a word out, cut it out." (For my money, the horrid word "that" can almost always be removed.) It's tough to delete something that you've written, but it's worth gritting your teeth and doing it because the end result is almost always a more focused and readable product.

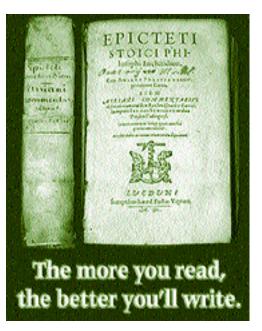
Everyone Loves Metaphors

In the animated movie *Shrek*, Eddie Murphy's Donkey character famously observed, "Everyone loves parfaits." Well, metaphors are the literary equivalent of parfaits: multi-layered and delicious. Everyone loves a good metaphor because it can provide a memorable and easily digestible representation of an important truth. Of course, metaphors can also be like ogres and onions: when they're bad, they stink. The point is to be careful in selecting your metaphor, and don't overdo it or it will topple like a too-tall parfait in the hands of a clumsy waiter, and you'll end up with literary whipped cream, berries, and whatnot all over the place. See what I mean?

How Do You Find The Time?

Yes, writing a three-page article can be a real drain on your time. I personally follow Dave Barry's model and literally spend *minutes* each month producing these pieces. All kidding aside, it really can be tough to make the time to write, and it often takes me months to cobble together enough minutes to complete an article.

My trick is to do most of my writing at 30,000 feet, as I'm jetting off to an exotic TDY locale like Omaha. It's about the only distraction-free time I have these days. (And yes, this means I usually skip the in-flight movie.) Being airborne may be a perfect muse for an Air Force officer like me, but others may find writing easier with their boots on the ground. When I'm not TDY, there's a



little kabob restaurant down the street that gets my creative juices flowing during all-too-rare long lunches. And believe it or not, I sketched out the idea for this article in the gym. Good thing I had a notebook nearby (hint, hint).

My other trick is to write several articles in parallel. Just because I haven't finished my first article is no reason I can't start writing a new one. At any given time, I tend to have three or four articles in various stages of completion. Some linger in a half-done limbo for a year or so before I figure out how to wrap them up, while others never see the light of day. Occasionally I'll accidentally finish two

or three at once, and they end up stacked on the editor's desk like 747's over O'Hare.

Still stuck for time? Keep in mind you are not alone (not bad advice for just about any endeavor). I had co-writers on five of my articles, and without exception, the quality went up while the amount of writing time required went down. So share the love and bring a partner on board, particularly if you have any incomplete articles hanging around. A new pair of eyes may be exactly what the doctor ordered.

Keep in Mind ...

Be human. My articles have addressed courage and honesty, creativity and heroism, life and death, goodness and evil, all within the context of program management. This is not a dry discipline, and there is no reason an article should be bloodless and dusty. Remember: you are a person writing for other people. Robots aren't going to read your article anytime soon, so go ahead and write with human beings in mind.

Be bold. Mel Brooks said, "The audience wants the best and bravest of you. They never want you to be politically correct. They want you to be fearless, honest, and crazy," He was talking to comedians and actors, but his advice is applicable to just about anyone with a story to tell. Writing for the public can be scary, and if it's not a little scary, you're probably not pushing the envelope enough. It's important to stick your neck out a little—or maybe even a lot.

Never use humor. It undermines your credentials and makes people think you are just some clown. Perpetual seriousness is the only thing that demands respect ... nah, I'm just kidding!

Continued on page 56

The Hanscom Learning Organization

A Solution for the Information Age

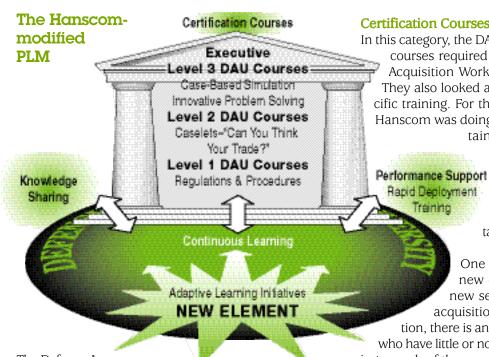
Frank Anderson ■ Lt. Col. Rob Dare, USAF ■ Rich Stillman

s more and more information is available and is being required on the job, finding, using, and sharing the right information are becoming tougher. Acquisition workforce members are expected to collaborate more, integrate better, and share knowledge more effectively. In addition, every employee is feeling the crush of changing guidance, policy revisions, and paradigm shifts. One of the key questions that many leaders are asking is this: How can we think and act differently in this new era?

Michael W. Wynne, the acting under secretary of defense (acquisition, technology, and logistics) (USD(AT&L)) has proposed a solution. One of his key objectives is to facilitate the development of learning organizations, a capabilitiesbased approach that promotes career-long learning and provides the workforce more control over their learning/information solutions. A concept developed in the early 1990s by MIT professor Peter M. Senge, a learning organization is essentially any organization that has a culture and structure that promotes learning at all levels to enhance its capabilities to produce, adapt and shape the future. When it is working effectively, the learning organization is like an orchestra. Information is available with the right content, at just the right time, on the right device, in the right context, and delivered in the right way. [Editor's note: for a more detailed explanation of the learning organization, see "DAU South Spearheads Learning Organization Initiative," Defense AT&L, July-August 2004.]

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Anderson is the president of DAU and a leading advocate for the development of learning organizations. **Dare** is chief of the Hanscom portion of the learning organization team. **Stillman** is director, Boston training site, DAU Capital and Northeast Region, and chief of the DAU portion of the learning organization team.



The Defense Acquisition University (DAU) has

been working with several DoD organizations to implement model learning organizations. One of the more successful efforts has been with the Air Force Electronics Systems Center (ESC) on Hanscom Air Force Base (AFB), outside Boston, Mass. Air Force Lt. Gen. William Looney and then Air Force Lt. Gen. Charles L. Johnson, II, the last two ESC commanding generals, are enthusiastic supporters of training and education. They envisioned the learning organization as a way to improve work efficiency; to share information better; to develop flexible access to training; to encourage continuous learning; to marshal resources for solving problems; to increase options for learning; and finally, to make learning part of the every day office environment. This commitment from the senior leadership was critical to the success of the learning organization.

PLM Forms Basis for Hanscom Pilot

To accomplish those goals, DAU and Hanscom formed a cross-functional team. Members represented the training community, the acquisition workforce, and various functional disciplines. The players came from DAU, the support wing at Hanscom, and the headquarters of the ESC. This cross-organizational team enhanced organizational thinking and brought interaction to a higher level than before. Using the USD(AT&L)'s performance learning model (PLM), the team began building a pilot program. The PLM is a convenient and effective model to identify all the components of learning/information that are essential to establishing a learning organization. It identifies four large categories of efforts: Certification Courses, Knowledge Sharing, Performance Sharing, and Continuous Learning. [Editor's note: see "The AT&L Performance Learning Model," Defense AT&L, July-August 2004.]

Certification Courses

Training

In this category, the DAU/Hanscom team looked at all the courses required for compliance with the Defense Acquisition Workforce Improvement Act (DAWIA). They also looked at all the required assignment-specific training. For the most part, the team found that Hanscom was doing well in this area. People were obtaining their required certification

courses and assignment-specific courses; however, there were no locally required courses. It became apparent to the team that there was a need for some locally targeted training.

One example of this training involved new employees. Every year, over 150 new second lieutenants are assigned to acquisition positions at Hanscom. In addition, there is an annual influx of new civil servants

who have little or no acquisition background. The training records of these new employees indicated that it generally took six months or more before they received their first acquisition training. The DAU/Hanscom team talked to many of the new employees and found that they felt they were under-utilized and ineffective during their startup period. They simply didn't have enough information to be active players in the acquisition process, and the seasoned acquisition professionals didn't have the time to effectively mentor and guide the new folks.

As a result, the team developed the idea of an Acquisition Boot Camp course, a three-and-a-half day-long course for new acquisition employees within their first 30 days on station. It is a very basic introduction to acquisition policy, contracting, systems engineering, financial management, and other topics. The intent is to give the stu-

Policy letters emphasized the importance of e-learning and encouraged managers to give workforce members time to work on their courses during the normal duty day

dents a generalized understanding of the acquisition process and the unique aspects of working at ESC. It provides them with enough information to support the work in their new offices and enables them to be more productive before their first DAWIA course. So far, Acquisition Boot Camp has received high praise from the students and their supervisors.

Knowledge Sharing

Knowledge sharing is where organizations conduct facilitated collaboration and coordinated information distributing. The DAU/Hanscom team found efforts in this category were barely on the radar screen. Most acquisition organizations look internally to solve their problems. They don't share their issues, problems, and concerns outside their offices or look externally for solutions. The team felt that a cultural change was in order.

As one of the first steps, the team established two small knowledge sharing organizations. Using volunteer labor and donated materials, the team was able to establish an e-learning center and an acquisition resource center. The Hanscom e-Learning Center is a central facility with computers, a server, and Internet access to online training, knowledge sharing systems, and communities of practice. It also provides such additional capabilities as a computer laboratory, an automated classroom, a simulation room, and a traditional classroom facility. The Acquisition Resource Center in the base library is a repository for books, periodicals, videos, and other acquisition-related materials, most of them available for checkout to the acquisition workforce. Both facilities are receiving popular support as people attempt to gather job-related information.

Performance Support

Another area at Hanscom AFB that needed emphasis was Performance Support. This category includes all the approaches available to management to enhance office productivity. It includes consulting, mentoring, coaching, facilitation, and tailored training sessions. The latter are timely training events designed to prepare an organization to do new work, such as source selection process training right before delivery of proposals. For select emerging initiatives, there is also rapid deployment training that provides targeted training to large numbers of people. The DAU/Hanscom team found that in the Boston area performance support was not always well represented.

Boston is a long way from the Washington, D.C., Beltway. New policies and process changes can be slow to filter down to the workforce here. The team realized that information on the new acquisition policy and the new resource allocation process simply wasn't being distributed. Hanscom needed to provide a convenient and cost-effective method to deliver that information. Using DAU core material, the team developed a series of tailored pre-

sentations on the changes. These presentations have been delivered to workforce members in program offices and to large cross-functional audiences. To date, over 700 people in the area have attended the briefings, and many others have reviewed the materials on the local Hanscom intranet site.

Continuous Learning

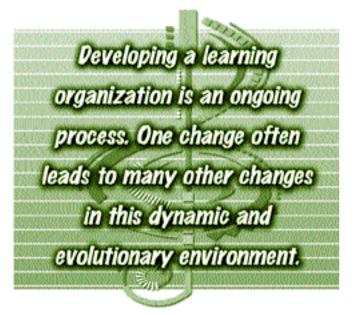
The Continuous Learning category includes all the efforts of acquisition people to maintain currency. It is driven by the Department of Defense mandate that acquisition workforce members must attend at least 80 hours of continuous learning every two years. At Hanscom, continuous learning has a presence, but it needs encouragements. Some offices do a great job of encouraging acquisition members to attend continuous learning opportunities; other offices do not. Overall, there is no systematic review of generalized needs, of methods of delivery, or of unique/local requirements. The team felt that they needed a consistent method to plan for and deliver continuous learning opportunities.

The result was the development of Integration Week, which is a bi-monthly effort to provide speakers on continuous learning topics. The speakers come from DAU, Hanscom AFB, local federally funded research and development centers, other government organizations, and from private industry. Speakers cover many topics in acquisition, general management, and operational issues. While most sessions last 90 minutes, some last for two days. Many employees fit several of the shorter sessions into each day of the Integration Week. During the most recent event, over 1,300 employees attended the 42 continuous learning sessions. Feedback from those employees noted the ease and convenience of meeting their continuous learning requirements in this structured environment.

The Missing Link: Adaptive Learning Initiatives

At this point the DAU/Hanscom team had substantially addressed all the categories of the USD(AT&L) PLM; however, the team was not done. They felt that at Hanscom something was still missing. They called this new element "adaptive learning initiatives." This category included the adaptations, changes, and feedback loop from local customers to impact the various projects in the other categories. The result may be seen in the diagram "The Hanscom-modified PLM" on page 49.

For example, the team heard from the local training monitors that there were problems for employees taking mandatory DAWIA online classes. When they tried to work on their classes from the office, there were multiple interruptions—the phone would ring; the boss would call; other employees would wander into their workspace. As a result, employees were discouraged, and online train-



ing was suffering. To complete their mandatory online courses, most employees had to work at home—on their own time, on their own computers. The team felt that this situation was sending the wrong message to the acquisition workforce.

Leadership at Hanscom came to the rescue. The team developed several training policy letters for the commanding general's signature. The policy letters emphasized the importance of e-learning and encouraged managers to give workforce members time to work on their courses during the normal duty day. They also helped to develop the proper learning environment by establishing a quiet and comfortable e-learning center where interruptions are minimized.

Evolutionary Process

DAU and Hanscom AFB are well on their way to developing a model learning organization. The structure and processes are in place; improvements are continuing; attitudes are changing; people are seeking new and innovative ways to gather and use information; and over 30 sub-projects are under way.

The DAU/Hanscom team, however, cautions that developing an learning organization is an ongoing process. One change often leads to many other changes in this dynamic and evolutionary environment. The keys to success appear to be a dedicated team working the project and consistent leadership support. As with most things, the organizational leader sets the tone. Information age changes, like developing a model learning organization, start with and are the products of leadership support.

Editor's note: The authors welcome comments and questions. Anderson can be reached at frank.anderson@dau.mil, Dare at robert.dare@hanscom.af.mil, and Stillman at richard.stillman@dau.mil.

"Process Clones," continued from page 40

their results. They take responsibility for their actions and outcomes. This buy-in and involvement has a positive effect on quality that far outweighs any potential redundancy of effort. As we pointed out in the first "Heroes" article, process helps avoid re-inventing the wheel—but it doesn't do to forget that sometimes the old wheels do need re-invention.

A final comment on process was inspired by *Re-Imagine!* Tom Peters' latest book, which devotes much of a chapter to the importance of heroes. It is true, we must have processes. And equally true, we must hate them. That is, we must not love our processes unduly; and when compared with our feelings about results, customers, and so on, our attitude toward process should look an awful lot like hate. In practical terms, that translates to a willingness to challenge our processes, refining or replacing them as necessary—"re-imagining" them, to use Peters' term. And heroes? Gotta love 'em.

Heroics and Process—Call a Truce

It is tempting to ask who makes the greatest contribution to organizational performance, the solid citizen who keeps his head down and unquestioningly follows the process, or the heroine who challenges, changes, improves, or replaces that process? That's the wrong question. Surely both contribute, and neither should look down on the other. Process and heroics are part of the same team, and ultimately it's about people. People can demolish a great process or salvage a lousy one.

Heroes are often unpredictable, but that shouldn't be confused with being unreliable. You may not know what the hero is going to do next, but there is great certainty about how things are going to turn out in the end. Reliability is important. Predictability is less so.

If we've said too few good things about process, that's only because so much has already been said by others far more experienced than we are. Program management literature is full of articles proclaiming the virtues of various processes, maturity models, and so forth. There is much to be said about those articles and ideas. We've aimed to provide not a counterpoint, but a complementary point, addressing a dimension of programmatic excellence that hasn't received much press—and of that, some undeserved bad press.

We only hope that J. Jonah Jameson will someday come to see the good things Spiderman contributes to his city.

Editor's note: The authors welcome comments and questions. Quaid can be contacted at quaidc@nga.mil and Ward at wardd@nga.mil.

Best Value Source Selection: The Air Force Approach, Part I

Alexander R. Slate real It might also be said that the Use of the term "best value" is a misnomer and that we are using this term where we actually mean "trade-off."

n using the best value approach, the government seeks to award to an offeror whose bid gives the greatest confidence that it will best and most affordably meet requirements. This may result in an award to a higher-rated, higher-priced offeror where the decision is consistent with the evaluation factors and the source selection authority (SSA) reasonably determines that the technical superiority and/or overall business approach and/or superior past performance of the higher-priced offeror outweighs the cost difference. The SSA, using sound business judgment, bases the source selection decision on an integrated assessment of the evalua-

tion factors and subfactors. Now, it might also be said that the use of the term "best value" is a misnomer and that we are using this term where we actually mean "trade-off."

Regardless of the process used, any award, including awards in a sealed bid selection, should represent the best value. The question is how to determine the best value. In trade-off source selections, we have recognized that paying more for some non-cost aspects is worth it.

The Air Force tends not to use quantitative methods for source selections. Proposals do not receive numeric grades. So how does the Air Force run source selections? The Air Force Supplement to the Federal Acquisition Regulation (AFFARS) part 5315 provides our guidance for source selections.

Four Selection Factors

We use four different factors: mission capability, proposal risk, cost/price, and past performance. Mission capability may be composed of any combination of subfactors, though these typically include technical performance and management capabilities (other subfactors are also acceptable; however, having more than six subfactors requires approval by the SSA) and is rated using a color scale, which is described later in this article. Every mission capability subfactor is also rated for proposal risk (high, medium, or low). The evaluation of cost and past performance rating are not described in this article, except as how they fit into the integrated assessment of the proposals. Cost and past performance factors typically do not have subfactors assigned to them.

The four factors are ranked in order of importance, and two or more factors may have equal ratings. For instance, we may rank in descending order of importance: mission capability, past performance, cost/price, and risk. We may also state that mission capability and past performance are equal in rating yet of greater importance than the remaining two. In our system, we state the relative importance of factors, typically using terms like "significantly," "more important," "equal," or "less important,"

Slate is a facilitator at the Brooks City-Base Acquisition Center of Excellence. He has been a program manager, test manager, and laboratory principal investigator during his civil service career.

rather than stating, for example, that mission capability is twice as important as cost/price.

The subfactors are also rank-ordered in the same manner as factors. Again, subfactors may be equal in importance and we do not assign a mathematical differential between them. Finally, according to AFFARS, past performance must be at least as important as the most important non-cost factor.

Defining the Terms

Each evaluator (or advisor) examines the proposals for his or her assigned area of responsibility. Section M of the request for proposal (RFP) contains a detailed explanation of the manner in which proposals will be evaluated—a description of what constitutes an adequate or acceptable proposal. It may sometimes also include a description of what constitutes a better-thanacceptable proposal.

In light of the definitions, the evaluators assign strengths, inadequacies, and deficiencies in the area of mission capability at the subfactor level. The definitions from AFFARS part 5315 and FAR part 14 are as follows:

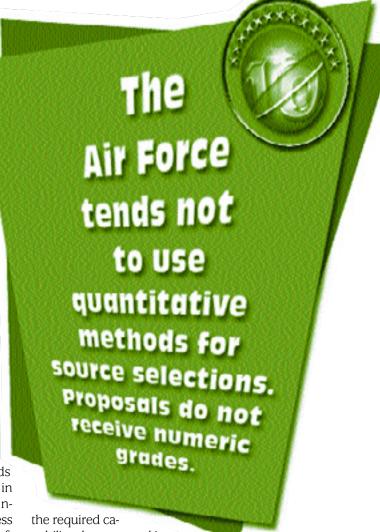
Strength—A significant, outstanding, or exceptional aspect of an offeror's proposal that has merit and exceeds the specified performance or capability requirements in a way beneficial to the Air Force, and either will be included in the contract or is inherent in the offeror's process Proposal Inadequacy—An aspect or omission from an offeror's proposal that may contribute to a failure in meeting specified minimum performance or capability requirements

Deficiency—A material failure of a proposal to meet a government requirement or a combination of significant weaknesses in a proposal that increases the risk of unsuccessful contract performance to an unacceptable level.

A few clarifications are still in order. If a proposal meets—only meets—the requirements of an adequate or acceptable proposal, that particular aspect will not have any strengths, inadequacies, or deficiencies. The proposal rating is green.

Strength

There are two things to note in the definition of "strength." The first is the wording "in a way that is beneficial to the Air Force" (or, for a more generalized situation, the government). This means that simply being better than acceptable is not sufficient, in and of itself, to warrant being assigned as a strength. For example, suppose we have an aircraft that requires the capability to cruise at Mach 2; one offeror proposes an aircraft that cruises at Mach 2.1, but we determine that cruising at Mach 2.1 offers no operational benefit. So even though Mach 2.1 is better than



the required capability, the proposed increase in cruise speed does not

meet the definition and is not considered a strength. A second offeror proposes an aircraft that cruises at Mach 2.5. Here we determine that cruising at Mach 2.5 offers increased survivability of the aircraft from attack. This is better than the required capability and offers a benefit, so it is rated as a strength.

The second thing to note in the definition of strength is "and will either be included in the contract or is inherent in the offeror's process." The first part of this, "will ... be included in the contract" is easy to understand. In the example just used, where we have a proposal of an aircraft with a cruising speed of Mach 2.5, this will be incorporated into the contract to become the contractual requirement.

The second part "or is inherent in the offeror's process" is, perhaps, harder to understand. Let us use cost accounting as an example. The requirement is the ability to track expenditures within two weeks of their being accrued. The offeror's accounting system, however, is good enough to enable us to track expenditures within a day of their being accrued. This is better than the requirement, and we determine that this offers us the benefit of

We state the relative importance of factors, typically using terms like "Significantly," "more important," "equal," or "less important," rather than stating, for example, that mission capability is twice as important as cost/price. being able to track earned value deviations more effi-

track earned value deviations more efficiently and therefore ensure cost and schedule accountability to a greater degree. This could be rated as a strength, but not necessarily written into the contract because it is a normal part of that offeror's operations.

Inadequacy or Deficiency?

The next point of clarification regards the difference between inadequacies and deficiencies. The first is one of scope. Say we have a performance requirement that we determine is not critical, and we would be willing to "CAIV" [cost as an independent variable] it. As an example, we have a requirement that the maximum system weight shall not exceed 5 pounds. An offeror proposes a system that weighs 6 pounds, and the added weight means that the system survivability is better and offers further benefits by requiring fewer spares and lower life cycle cost. We determine that the combination of improved survivability, reduced spares, and lower life cycle cost is a good tradeoff for the increased weight. This capability does not meet the weight requirement and thus should not be acceptable, but the trade-off is such that we have an inadequacy rather than a deficiency.

As a counter example, let us say that we require a helmet weighing no more than 3 pounds. The offeror proposes a helmet that weighs 4 pounds. The extra weight will re-

sult in a greater occurrence of neck injuries under g-loading conditions. This is a safety issue and described in the RFP as a key performance parameter (not subject to trade-off). We are, therefore, not prepared to accept a 4-pound helmet, and thus the proposal has a deficiency, not an inadequacy.

A second potential difference between inadequacies and deficiencies is one of clarity. In other words, it is the difference between requiring a proposal revision or not requiring a proposal revision. The offeror proposes a process, which we fully understand and determine is not acceptable. This proposal is deficient because the offeror would have to change the process for it to be acceptable. This would require a proposal revision if the government initiates discussions culminating in a request for a final proposal revision (FPR). A second offeror proposes a process that we don't fully understand but which seems not to be acceptable (as we understand it). This second proposal is inadequate rather than deficient because clarification (a better explanation of the process) may lead to our determining that the process is adequate. Therefore, the offeror doesn't need to change to the proposed process, but only provide some further explanation. This is not cause for a proposal revision.

A third potential difference is failure to follow the requirements of section L (the instructions to the offerors). If something that was supposed to be included in the proposal is missing, the proposal is deficient. Providing the offeror an opportunity to submit additional items to the proposal after the RFP closing date would require the government to issue an FPR.

The fourth potential difference is in the definition of deficiencies, "or a combination of significant weaknesses in a proposal ... to an unacceptable level." We haven't discussed weaknesses yet because they relate to risk, not to the color ratings. But essentially, a combination of risks that makes the overall program proposal risk exceedingly high and therefore extremely difficult to manage could be considered a deficiency.

Color it Best Value

Once we have completed the determination assignment of strengths, inadequacies, and deficiencies to each proposal, we need to assess the subfactors and assign color ratings to each. The explanations of the four color ratings—blue, green, yellow, and red—come from the AF-FARS, Part 5315:

Blue/Exceptional—Exceeds specified minimum performance or capability requirements in a way beneficial to the Air Force

Green/Acceptable—Meets specified minimum performance or capability requirements necessary for acceptable contract performance

Yellow/Marginal—Does not clearly meet some specified minimum performance or capability requirements necessary for acceptable contract performance, but any proposal inadequacies are correctable

Red/Unacceptable—Fails to meet specified minimum performance or capability requirements. Proposals with an unacceptable rating are not awardable.

Here things become fuzzy. Some believe this fuzziness is beneficial, and others view it as problematical. Let's look at mission capability. We have looked through a proposal and determined which subfactors exhibit strengths, inadequacies, or deficiencies. Based upon these determinations, the appropriate subfactor is given a color rating. There is no numeric requirement for strengths versus inadequacies or even deficiencies to assign a particular color (though it is important that we are consistent in how we do so within a source selection). In other words, just because a particular proposal has more strengths than it does inadequacies and deficiencies combined, does not mean that it receives a blue rating, nor does it necessarily indicate that it is even a green rating. Earlier we also discussed a proposal for which a subfactor is simply acceptable, not having any strengths, inadequacies, or deficiencies. By definition, the rating for that subfactor is green.

The presence of deficiencies would lead us to a yellow or a red rating (particularly a red rating) because a deficiency is typically the failure of a proposal to meet a government requirement, making for an un-awardable contract. The question here is whether the shortfalls can be traded for strengths in a CAIV analysis. These deficiencies would, of course, have to be in minor, relatively unimportant areas and would require the modification of the system specification prior to the signing of the contract. Earlier, we used the example of system weight—a non-key performance parameter requirement—exceeding the 5-pound limit and thereby enabling more important performance requirements than our threshold requirements. This means that the initial deficiencies could become either acceptable or inadequacies in the final analysis without any change to the proposal. This assumes that some sort of CAIV analysis statement was included in the RFP. It is theoretically possible, therefore, to have a green rating with deficiencies in the initial ratings, but not in a final rating.

Some will argue that since neither the requirements nor the proposals have changed, these items are still deficiencies, but "acceptable deficiencies," a category not recognized by either the FAR or AFFARS. The reasoning is

Differences Between Color Rating and Risk

trengths, inadequacies, and deficiencies deal with this question: Does what the offeror promises (or more formally proposes) meet our needs? This is irrespective of whether you believe the offeror can actually accomplish what they propose. This is the source selection's color rating aspect. (The exception to this is the issue regarding combinations of weaknesses and deficiencies.)

The official definition of weakness (from the FAR) is "a flaw in the proposal that increases the risk of unsuccessful contract performance." A "significant weakness" in the proposal is a flaw that "appreciably increases the risk of unsuccessful contract performance." Weaknesses deal with the question: Given the approach, what is the likelihood that it will drive up costs, degrade performance, extend schedule, or require additional oversight?

A different way to pose that question is this: What is the likelihood that the offeror can actually deliver what they promise? And in the context of determining risk, it doesn't matter whether what is proposed meets our needs or not. This is the source selection's risk aspect.

that neither FAR nor AFFARS has been changed sufficiently to recognize the full impact of CAIV in the source selection process.

If, however (noting our definition of a deficiency), the deficiency is one that increases the risk of a successful contract performance to unacceptable levels, it is not likely that any justification will suffice. In the end, however a team chooses to handle this type of situation, the written ratings justification is critically important and must be able to stand up to the "reasonable person test"—in other words, could a reasonable outsider, looking at the justification agree with the determination? (It would be logical to expect that we next roll these subfactor ratings up into an overall factor rating; however, this goes against the strictures of AFFARS part 5315.)

Proposal Risk

Proposal risk does not receive a color rating. Instead it receives one of the following assessments (from the AF-FARS, Part 5315):

High—Likely to cause significant disruption of schedule, increased cost or degradation of performance; risk may be unacceptable even with special contractor emphasis and close government monitoring

Moderate—Can potentially cause some disruption of schedule, increased cost, or degradation of performance; special contractor emphasis and close government monitoring will probably be able to overcome difficulties Low—Has little potential to cause disruption of schedule, increased cost or degradation of performance; normal contractor effort and normal government monitoring will probably overcome difficulties.

The proposal risk is based upon weaknesses associated with the offeror's proposed approach and is assessed at the subfactor level. Weaknesses are the narratives of the elements of the proposal that add risk. As opposed to strengths, inadequacies, and deficiencies associated with color ratings, the Air Force identifies weaknesses for risk. Typically, these weaknesses describe areas of moderate or high risk requiring additional oversight, cost, and/or schedule increases; these areas have the potential to degrade performance and lead to the likelihood of unsuccessful contract performance.

There is generally no necessary correlation between the risk and the color rating. Areas that generate strengths can also generate risks. Thus, a particular subfactor of a proposal could see a weakness narrative on the very same proposal that has a strength narrative. For instance, a very strong technical approach may be very risky because it most likely can't be accomplished in the required contract timeframe. Conversely, a proposal that is inadequate or deficient may or may not have a weakness.

The subfactors, and factors of proposal risk normally mirror those that are involved in the color rating aspect of the source selection. What this means is that we rate the mission capability subfactors for risk as well as determining strengths, inadequacies, and deficiencies. Occasionally, there may be some subfactors that receive a color rating, but are not assessed for risk. The sub-contracting plan (often a subfactor in program management) is one such area where this is often the case.

Part II of this article will touch very briefly on cost and past performance, then go on to address another part of the process—one that some people consider fuzzy: the integrated assessment.

Editor's note: The author welcomes questions and comments. He can be contacted at alex.slate@brooks.af.mil.

"Article," continued from page 47

Writing should be fun to do and fun to read. There's no reason to be serious all the time. As Dr. Jerry Harvey of *The Abilene Paradox* fame put it, "Have you ever known a competent professor, preacher, politician, manager, employee, or student who wasn't funny, who didn't have a sense of humor or an appreciation of the absurd?" Your readers like to laugh, and they're more likely to read and remember something that's occasionally funny.

Respect your audience. Both their intelligence and their time. Make it worth their time to read your stuff, and don't be afraid to explore technical or otherwise intellectually challenging topics. Most of your readers will be smart enough to follow along, and those who aren't, just might learn something. Say what you have to say as clearly as you can and avoid overcomplicating things, but there is no reason to shy away from something just because it requires a certain amount of smarts.

Trust your editor. He or she has been in the business for a while, knows the audience, and knows good writing. Smart writers listen closely to what editors say. Editors really have your best interests in mind because they look good when authors look good. Everyone's article gets edited at least a little, so don't take offense if your submission comes back with a few changes. By all means, if you don't understand the reason, go ahead and ask why something was changed, and it's OK to push back if you feel strongly about something, but as a general rule, the changes an editor suggests are right on target. (Oh yeah—buttering up your editor doesn't hurt your chances of publication either—just don't be too obvious about it!)

Keep at it. You may not be satisfied with your first draft. Even if you are, take another look anyway. Keep plugging away in whatever free moments you have, and it's OK if it takes a while to finish. If the editor isn't interested, rework it, get a new magazine, or get a new blank piece of paper and start over. For that matter, start writing your second article before you finish the first one.

The Last Word

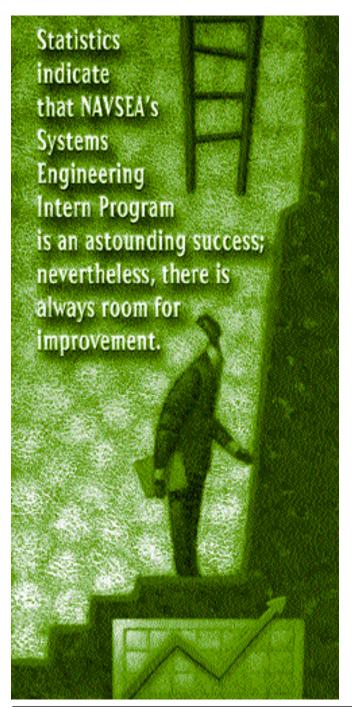
I'd like to close with a few words from that great American philosopher Steve Martin. In a chapter titled "Writing Is Easy!" from his book *Pure Drivel*, he explains, "Writing is one of the most easy, pain-free, and happy ways to pass the time in all the arts. ... I'm never at a loss for what to write. ... I would recommend to writers that they live in California. ... Finally, I can't overstress the importance of having a powerful closing sentence."

Editor's note: The author welcomes comments and questions. Contact him at wardd@nima.mil.

NAVSEA's Acquisition Systems Engineering Intern Program

Enjoying Success, Looking for Improvement

Matthew T. Tropiano, Jr.



he NAVSEA (Naval Sea Systems Command) Acquisition Intern Program (AIP), established on Oct. 1, 1992, was created to build a cadre of highly skilled professionals to meet projected acquisition workforce needs. It is funded by the assistant secretary of the Navy (ASN) through the director of acquisition career management (DACM), and is administered by the career management site in Mechanicsburg, Pa. NAVSEA's Systems Engineering Intern Program, Contracting Intern Program, and Logistics Intern Program fall under the auspices of AIP. Engineering allocations and subsequent hires have progressively increased since the inception of AIP. Last year, 62 interns were hired at 15 different NAVSEA activities through the Systems Engineering Intern Program, and this year, NAVSEA has 68 engineering allocations and 111 allocations overall. The two- to two-and-a-half-year program targets positions at activities nationwide and includes systematic career development with rotational assignments (preferably including a posting at NAVSEA headquarters), mentoring, training, and certification at DAWIA Level II. Interns in the program are referred to as engineers.

Assessing the Health of the Intern Program

Last year, NAVSEA's Systems Engineering Intern Program was evaluated for effectiveness. Forty current engineers, 32 recent graduates, 15 past graduates, and 25 career field managers and homeport supervisors (see page 60 for definitions) were surveyed and interviewed. In addition, 140 interns and graduates in NAVSEA's Logistics Intern Program and Contracting Intern Program are currently being surveyed and their responses evaluated.

In October 2003, after the survey, a national engineering manager's meeting was held to enhance and improve NAVSEA's Systems Engineering Intern Program through the following:

- Reviewing feedback
- Discussing suggestions and recommendations for change
- Sharing best practices

Tropiano, the program manager for Naval Sea Systems Command (NAVSEA)'s acquisition intern programs, holds a bachelor's degree in electrical engineering, a master's in religious studies, and a master's in business administration.

- Committing to best practices and recommended changes
- Establishing contacts for networking and questions.

The survey provided an overall assessment of the program from key participants, as well as insights into the effectiveness of local management at the activity level. The survey pointed out key issues that required refinement, such as excessive downtime during internships and initial experiences on the job. Some concern was expressed regarding administration of the program by both Mechanicsburg, Pa., and NAVSEA Headquarters, and recruitment. Areas receiving high marks included the value of rotations, networking, and hands-on experience.

High Overall Assessment

Overall, the program received a high review. Eighty-seven percent of current engineers and graduates said they would enter the program again. Some of those who said they wouldn't reenter the program cited faster advancement outside the program or the desire to focus on a specific technical area rather than rotate into headquarters.

Nearly 93 percent of the graduates in the program got the jobs they initially wanted, while 74 percent of the engineers in the program stated that their experience, thus far, has met expectations. While systems engineering cannot be mastered in a year or two, 89 percent of managers indicated that engineers were learning systems engineering, and 78 percent of graduates and 63 percent of current engineers also said they were learning systems engineering.

Sixty percent of the engineers surveyed cited rotations, the core of NAVSEA's Systems Engineering Intern Program, as the most valuable aspect of the program. Networking, a derivative benefit of rotations, was also regarded as a value; engineers valued working with leading engineers. Most managers were at a loss as to how to effectively promote their rotations through the Mechanicsburg Web site and NAVSEA's corporate intranet. A few managers requested that interns spend more than the usual three to four months on a rotation.

As engineers described their best experiences, a pattern emerged: more value was derived from events, trips, or rotations that provided hands-on experience. Engineers gave as examples of invaluable experiences, involvement in engineering and design, time on a ship, hands-on experience at a research lab, testing and installation, or a full-scale sea trial.

Several engineers suggested that a broad training course on naval engineering and an orientation to the Navy and Navy ships be offered to remedy a lack of naval background.

The statistics indicate that NAVSEA's Systems Engineering Intern Program is an astounding success; nevertheless, there is always room for improvement.

Improving a Successful Program

The major areas of improvement as indicated by survey respondents were:

- Management training and program awareness
- Downtime and improper scheduling
- Misleading nomenclature
- Administrative issues
- Recruitment.

Management training and increased program awareness

Most noted as requiring improvement were management training and increasing local awareness of the program. Six out of 10 current engineers and graduates indicated insufficiently trained managers as a problem area. Some engineers found that their managers knew little about the program. Some engineers indicated that busy work schedules interfered with time for training, networking, and rotational opportunities. A few engineers felt the manager saw them as free labor rather than as aspiring systems engineers to be developed. Lack of structure, guidance, and oversight were also cited as problematic.

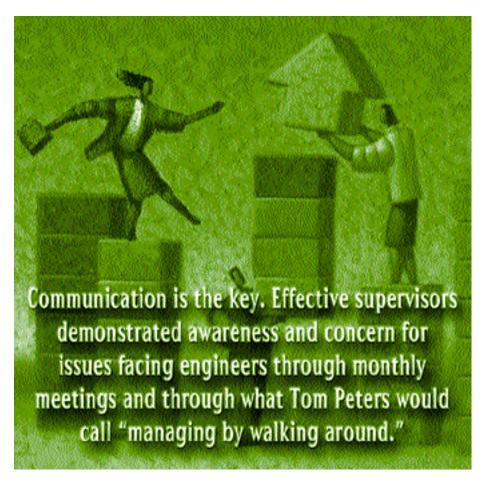
Downtime and improper scheduling

Forty percent of the current interns and 20 percent of graduates cited downtime as an issue. Among the problems were lack of a computer or telephone and delays in obtaining a badge. Some engineers said they finished assignments in two days that their managers expected would take two weeks. Several managers acknowledged that they weren't fully aware of the program procedures and felt shorthanded to run the program properly. One career field manager requested someone to evaluate and help administer the program.

"Intern": misleading nomenclature

Sixty percent of current engineers, past graduates, and managers indicated that the term "intern" was an issue. Several current engineers reported a sense of belittlement associated with the term and reported receiving such questions as "When are you going back to school?" or "Will you be working with us for just the summer?"

When asked about changing the name, some managers thought it would create further misunderstanding. Other managers indicated that the existing term created confusion during recruitment: "The applicants confused intern with co-op," stated one of the career field managers. While several managers understood the engineers' concern, others stated that the name was appropriate and that the issue was merely bureaucratic.



Administrative issues

Forty-four percent of the current interns, 50 percent of the graduates, and 74 percent of the past participants indicated that various administrative areas needed improvement. Paperwork issues, such as travel claims and reimbursements, as well as budgeting, were noted. One engineer was ready to go on rotation when informed that because of the budgeting freeze, the rotation would not be permitted. Other engineers complained they couldn't take classes as a result of the budgeting problem. Quarterly meetings were also cited as an area for improvement by 20 percent of respondents

Obstacles to recruitment

Fifty-seven percent of the managers' concerns were in the area of recruitment, although many noted improvement in this area in recent years. The three problem areas were inability to hire engineers until late in the fiscal year, slow response times to hiring actions, and the gap between recruitment and hiring time.

Effective Administration Requires Management Investment

From an overall perspective, the programs that were the most successful (retention of engineers, satisfaction level) were those where the managers were not only actively involved in the program and career development of the engineers, but where the managers and human resources

(HR) personnel were proactively involved in the "womb-to-tomb"— recruitment to final graduation and placement—career development of the engineer.

The effective administration and management of NAVSEA's Systems Engineering Intern Program is not without costs. Managers who successfully administer programs spend from 20 to 25 percent of their time working with the program. However, the benefits are exponential. Success breeds success, and in those activities where the program is administered effectively, the energy and enthusiasm is contagious and passed on to each successive engineer. Programs lacking in effective administration, however, result in an infectious negativity that lowers retention and increases dissatisfaction.

Best Practices and Recommendations

A review of best practices and recommendations focuses on local

management of the program; engineers' first days and downtime; the "intern" terminology issues; and administration at DACM (Mechanicsburg) and headquarters.

Local management of the program

Effective programs establish and maintain the relationship with the engineer from the time of recruitment to the first day of work and throughout the program. Early in the recruiting year, one career field manager visits various colleges, speaking with potential candidates, and inviting highly qualified candidates to visit Keyport, Wash. Another career field manager presents the advantages and the distinctive features of the program at various engineering job fairs. HR maintains regular contact with the intern from recruitment to job offer and acceptance, through the paperwork process, the first day of work, and throughout the program. At the activity level, the career field manager trains homeport supervisors and rotational assignment supervisors (definitions on page 60), and reviews the purposes and functions of the program.

Following each assignment and rotation, the engineer and rotational assignment supervisor provide feedback to the career field manager about the assignment. The career field manager then reviews the feedback individually with the engineer and rotational assignment supervisor: Is this an assignment that the activity should continue to offer? Can it be improved? Was this rotation

a good match for this engineer? Successful activities have active instructions for the engineer administration and have one point person available for all concerns. Standardized and centralized training and an annual meeting for career field managers and homeport supervisors were recommended.

Communication is the key. Effective supervisors demonstrated awareness and concern for issues facing engineers through monthly meetings held by the career field manager and through what Tom Peters would call "managing by walking around." Effective career field managers visited engineers on assignment. At Keyport, a Web site enabled the engineers and newly hired engineers to network. Monthly meetings, the interaction of seasoned and new engineers, and other engagement between engineers all combine to create a supportive network.

Local management of program rotations

In addition to communication between the career field manager and the rotational assignment supervisor, and a written agreement detailing the assignment and equipment provisions, career field managers must continue active engagement with the engineer throughout the assignment. When choosing outside rotations, the career field manager, homeport supervisor, and the engineer must discuss an assignment that will be mutually beneficial, often based on the engineer's interests, his or her eventual placement, and the homeport activity's connection with the external activity. Following the completion of a rotation, the engineer and rotational assignment supervisor provide an evaluation. The career field manager reviews the evaluations and makes recommendations and any necessary adjustments. Rotations can also be established through the engineer's own initiative and postings on the corporate intranet and the Mechanicsburg Web site. One career field manager established a Web site that mapped out engineering rotations, allowing interested engineers to click on the locations, read a rotation description, and find contact information.

Local management of the program individual development plan

At effective activities, the individual development plan (IDP) is completed within three months of the engineer's start day, in accordance with the *Navy Intern Implementation Manual for Managers* and the *Survival Guide*. The career field manager actively participates throughout its development and fulfillment. One career field manager established an online IDP that allows competencies to be added and provides building blocks guiding interns to fulfillment of competencies.

While it's understood that the program is implemented and managed in different ways at different locations, some best practices and recommendations can be implemented across the board. Career field managers need

NAVSEA's Systems Engineering Intern Program Position Definitions

Career field manager—The individual accountable for the content of the intern's career field development at a command/activity

Homeport supervisor—The individual to whom an intern reports at the command where the target position is located

Rotational assignment supervisor—The individual to whom an intern reports when on an assignment other than with the homeport supervisor.

to better understand their responsibilities, and engineers need to understand their own expectations, as well as the competencies required of them prior to graduation.

Strategies for resolving issues concerning first days and downtime

Many respondents commented on the downtime during their first week on the assignment. Activities must be ready for the engineer; tasking should be defined and documented for the first four weeks. One best practice for beginning engineers is to have rotational assignment managers sign an agreement that on the start date, the engineer will be provided with a phone, computer, and whatever else may be needed. The agreement should also outline the description and objectives of the assignment. The engineer should be registered for ACQ 101 immediately after reporting to work.

A mentor with at least three years' experience should be assigned to the arriving engineer, who can shadow and receive counsel from the mentor. The mentor also introduces the new employee to co-workers who can provide insight into other work areas. Another simple but excellent practice is to assign an established engineer to meet the starting engineer on the first day. This provides a resource for problems the engineer may encounter, as well as providing another building block and investment in the continual and consistent development of the relationship with the engineer. To this end, pre-arrival communication is essential.

Career field managers must inform and educate the engineers about the reality of working for the government. The arriving engineer needs to understand initial expectations. One manager urges incoming engineers to be patient and understanding and to be attentive to the impressions conveyed through dress, behavior at the computer, and phone conversations. Another manager

encourages engineers to proactively seek out more work if they are not busy. Career field managers need to encourage engineers to network with professionals outside the program across the positional and experiential spectrum. Engineers within a program might not have the answers to some issues, and limiting interaction to that population limits opportunities and broad knowledge.

The name game: improving nomenclature

A biblical proverb says, "Death and life are in the power of the tongue." Put another way, our words have the power of life and death. Since many of the engineers in the program viewed the word "intern" as a "death" word connoting temporary and free labor, it was agreed to call the intern program the NAVSEA Systems Engineering Development Program (NSEDP) and to call the participating members by the appropriate professional title, such as "mechanical engineer" or "electrical engineer."

Through ongoing commitment, involvement, and minor adjustments, we can best serve our future warfighter.

Communicating with administration: DACM and Headquarters

The engineers pointed out that the National Intern Conference was only helpful if they were able to attend it soon after being hired. If they attended more than six months after starting work, the information lost much of its value. The conference is now held more frequently. Headquarters has streamlined quarterly meetings, involved more engineers in the meetings, and provided relevant speakers at these events.

Programming the Future

Our incoming engineers are the designers and developers serving our future warfighters. We're facing an anticipated bow wave of retirements, meaning that well-run programs such as NAVSEA's Systems Engineering Development Program are more important than ever. Also, we continue to ask more and more of the AT&L workforce (for example, to do more with less), meaning once again that well-run programs such as this are important for shaping the future workforce. We're in competition in the marketplace for new talent. If these programs are poorly run, we will lose that competition.

Managers and staff must be involved from start to finish in the development and mobilization of our engineers. The development and training begins the first time AT&L managers and staff meet the prospective engineers. My research has shown that the engineer's first day can be the springboard to an impacting developmental experience or a quicksand to a discontented employee. Managers' involvement, commitment, and knowledge of the program are invaluable and not soon forgotten by the incoming engineers. Hands-on experiences remain prominent on the engineers' minds and vital to their development throughout their training.

NAVSEA's Systems Engineering Development Program has received good reviews, but "good" is the number one enemy of "best." Only through ongoing commitment, involvement, and minor adjustments, can we best serve our future warfighter.

Editor's note: The author welcomes comments and questions. He can be contacted at tropianomt@navsea. navy.mil.

DEPARTMENT OF DEFENSE NEWS RELEASE (MAY 21, 2004)

NEXT GENERATION AIRCRAFT CARRIER CONTRACT AWARDED

he Navy and Northrop Grumman Newport News (NGNN) have successfully negotiated the construction preparation (CP) contract for CVN 21, the next generation aircraft carrier. CVN 21 will be the centerpiece of tomorrow's carrier strike groups and a contributor to the future expeditionary strike force as envisioned in "Sea Power 21."

Advance procurement and advance construction of components and associated design efforts in support of the anticipated fiscal 2007 ship procurement for CVN 21 are provided for under the contract.

The CVN 21 CP contract is a three-year, costtype contract for advanced procurement of material, design and engineering, and advance construction of CVN 21.

The total value of the contract is \$1.4 billion, which includes a fee earnable to \$161.9 million. This contract includes cost, schedule, and performance incentives designed to ensure CVN 21 requirements are met at an affordable price.

Speaking about the contract, John Young, assistant secretary of the Navy for research, development and acquisition said, "The contract agreement reached by the Navy and the Northrop Grumman Newport News team is an important step in the course charted for development of the next generation aircraft carrier. This contract provides for the continued design and development of the next generation aircraft carrier, as well as incentives for NGNN and the Navy team to work together to develop and manage the design of the CVN 21. The contract structure has a portfolio of incentives that focuses on obtaining the most innovative ship design that will meet the program's performance goals, while emphasizing timely delivery and control of all costs-material, labor, facilities, overhead, and construction. This CP contract is a win-win for both the Navy and NGNN and is a significant accomplishment for the CVN 21 program. The contract establishes key metrics for NGNN and the Navy and provides the tools necessary for the Navy to work with NGNN to manage the design of CVN 21."

For more information, please contact Navy Public Affairs at (703) 697-5342.

ARMY NEWS SERVICE (MAY 26, 2004) 'ON POINT' SHARES OIF LESSONS LEARNED

Joe Burlas

ASHINGTON—A little more than a year after the end of major hostilities, the Army released May 25 its first major study on operations that liberated the Iraqi people.

Hard copies of *On Point: The United States Army in Operation Iraqi Freedom* are available through regular Army publications channels, and an online version can be viewed at http://onpoint.leavenworth.army.mil>.

The Army has released its first comprehensive unclassified study on the Army actions during the major hostilities phase of Operation Iraqi Freedom. The online version is available at < http://onpoint.leavenworth.army.mil > .

DoD image

The book is not intended to be a definitive history of what exactly occurred during Operation Iraqi Freedom, but an overview, ac-

cording to its three coauthors.

"Soldiers see what is in front of them, not the big picture [in battle]," said retired Col. Gregory Fontenot, "On Point" coauthor. "We wanted to communicate clearly and effectively what happened. This is the story of America's Army."

And it is a story primarily intended for soldiers and defense officials, with a secondary audience of family members, Fontenot said.

Borrowing on Saddam's threat of the "mother of all battles," Fontenot said they could have used one command's 650-slide "mother of all briefings" after-action report as the basis for their study, but most soldiers would not endure reading nothing but dry facts.

The authors—Fontenot, Lt. Col. E.J. Degen and Lt. Col. David Tohn—said they purposely wrote the study as a story,

not just dry history. They avoided heavy use of military jargon, he said. And they used vignettes and quotes from soldiers throughout the Central Command area of operations to highlight the study's discussion of what occurred.

In reviewing the deployment phase of the operations, the book describes plane loads of soldiers arriving in theater, often with nobody in charge to meet them and the ensuing search in the dark as 300 soldiers try to sort out which duffle bag belongs to whom

In the early hours of active combat, they used a story from a psychological operations officer who described what may have been the first Iraqi combat death.

"The cause of death was a box of leaflets that fell out of a Combat Talon aircraft when a static line broke. The box impacted on the Iraqi guard's head, and 9th PSYOP Battalion may have achieved the first enemy KIA of Operation Iraqi freedom."

The study acknowledged that psychological operations did not lead to the mass surrender of Iraqi forces as many Army leaders expected. Rather, most regular Iraqi military forces did not stand and fight, but melted away before coalition attack.

On Point discusses the good and the bad—including the ambush of the 507th Maintenance Company and the deep Apache air attack that went wrong.

The Army does a good job of looking at and learning from its failures so that the same mistakes will not be made in the future, Degen said.

Fontenot said the authors realize that the study is onesided, as there is not the balance of perspective that would have been achieved by including enemy sources.

"We know this is not the perfect book, but it allows us to use it as a starting point on discussions of what occurred." Fontenot said.

And some of the study's insights have already impacted the way the Army currently trains. Tohn credited the study for the creation of an Iraqi village at the Joint Readiness Training Center, Fort Polk, La., and a cluster of similar villages at the National Training Center, Fort Irwin, Calif.

"The Army is a learning organization," Tohn said. "The Army is not waiting for a final study to make changes."

Chartered in April 2003 by Gen. Eric K. Shinseki, Army chief of staff at the time, the 30-member study group was directed to conduct "a quick, thorough review that looks at the U.S. Army's performance; assesses the role it played in the joint and coalition team; [and] captures the strategic, operational, and tactical lessons that should be disseminated and applied to future fights."

The team collected more than 2,220 audio interviews, 1,500 video interviews, 236,000 documents, and 79,000 photos for the study in May and June 2003. That research material is archived at the Center of Army Lessons Learned, Fort Leavenworth, Kan., for future studies.

The first draft of the book went to Army senior leaders in August. Two drafts later, the book was approved for publication in December.

DEPARTMENT OF DEFENSE NEWS RELEASE (MAY 27, 2004) NAVY FLIGHT 0 LITTORAL COMBAT SHIP

NAVY FLIGHT 0 LITTORAL COMBAT SHIP CONTRACT OPTION AWARDS ANNOUNCED

he Department of Defense announced today that Lockheed Martin Corp., Maritime Systems & Sensors, Moorestown, N.J. (\$46,501,821) and General Dynamics–Bath Iron Works, Bath, Maine (\$78,798,188) are each being awarded contract options for final system design with options for detail design and construction of up to two Flight 0 Littoral Combat Ships (LCS).

"Today's Littoral Combat Ship decision represents an important milestone for the warfighter and the acquisition team," said John Young, assistant secretary of the Navy for research, development and acquisition. "The acquisition team is successfully changing how we buy ships—completing the source selection on schedule and developing affordable designs that can adapt to changing technology. The strong efforts by our industry partners have produced LCS seaframe designs that deliver solid value for the taxpayer's dollar and provide the speed, ride quality, and mission payload capacity sought by the fleet."

Operational experience and analyses indicate that potential adversaries will employ asymmetric capabilities to deny U.S. and allied forces access in critical coastal regions to include strategic chokepoints and vital economic sea lanes. Asymmetric threats will include small, fast surface craft, ultra-quiet diesel submarines, and various types of mines.

"The future for the Navy-Marine Corps team requires our naval forces to dominate the near land battlespace and

provide access for our nation's joint warfighting team," said Chief of Naval Operations Adm. Vern Clark. "LCS will deliver capabilities to enable our Navy to dominate in this critical littoral region. These ships will be a vital component of tomorrow's carrier strike groups (CSGs) and expeditionary strike groups (ESGs). We need this ship today."

The LCS is an entirely new breed of U.S. Navy warship. A fast, agile, and networked surface combatant, LCS's modular, focused-mission design will provide combatant commanders the required warfighting capabilities and operational flexibility to ensure maritime dominance and access for the joint force. LCS will operate with focused-mission packages that deploy manned and unmanned vehicles to execute missions as assigned by combatant commanders.

LCS will also perform Special Operations Forces support; high-speed transit; Maritime Interdiction Operations; Intelligence, Surveillance and Reconnaissance; and Anti-Terrorism/Force Protection. While complementing capabilities of the Navy's larger multi-mission surface combatants, LCS will also be networked to share tactical information with other Navy aircraft, ships, submarines, and joint units.

DTIC ESTABLISHED AS A DOD FIELD ACTIVITY

ore than 300 civilian employees of the Defense Technical Information Center (DTIC) at Fort Belvoir, Va., greeted Dr. Ronald Sega, director, defense research and engineering (DDR&E) on July 7, 2004, as he marked the establishment of DTIC as a Department of Defense Field Activity. DTIC will be under the office of the under secretary of defense for acquisition, technology and logistics (AT&L) and will report to Sega.

Sega's meeting with DTIC staff followed the signing of a decision memorandum on June 4, 2004, by Paul Wolfowitz, deputy secretary of defense, which elevated DTIC to field activity status.

DTIC's products and services are used by its customers to maximize research knowledge in performing the multibillion dollar DoD research efforts authorized and funded annually by Congress. DTIC provides DoD with information on research activities of other DoD agencies and their contractors. This prevents unnecessary or duplicate research at the taxpayers' expense.

Well known as the DoD central facility for defense information for almost 60 years, DTIC provides a one-stop



Assistant Secretary of the Navy for Research, Development and Acquisition John Young, also presidential nominee for the position of principal deputy under secretary of defense for acquisition, technology and logistics, briefs reporters at the Pentagon on the new class of Navy ships known as Littoral Combat Ships (LCS) on May 27, 2004. Young announced the awarding of contracts to Lockheed Martin Corporation, Maritime Systems & Sensors in Moorestown, N.J., and General Dynamics' Bath Iron Works in Bath, Maine, to produce two prototype ships each.

DoD photo by R.D. Ward

access point to DoD scientific, research and engineering information. DTIC resources are available to DoD, the military services, other U.S. government agencies, contractors to DoD and other government agencies, potential contractors, and universities with federal research grants. The gateway to DTIC's products and services is its Web site < http://www.dtic.mil > . Registration is required to access many DTIC products and services.

For more information about how to obtain DTIC products and services, contact bcporder@dtic.mil or call (703) 767-8244.

DEPARTMENT OF DEFENSE NEWS RELEASE (JUNE 14, 2004)

BOEING TO DEVELOP NAVY'S MULTI-MISSION MARITIME AIRCRAFT

he Department of Defense announced today that McDonnell Douglas Corp., a wholly owned subsidiary of the Boeing Co., has been awarded a \$3,889,979,744 cost-plus-award-fee contract to develop the U.S. Navy's Multi-mission Maritime Aircraft (MMA).

This milestone will launch the MMA program into the system development and demonstration (SDD) phase of the acquisition program. During the SDD phase, the program will focus on developing a system that will significantly transform how the Navy's maritime patrol and reconnaissance force will man, train, operate, and deploy. Ultimately, the MMA will replace the U.S. Navy's aging fleet of P-3C Orion aircraft, thereby securing the Navy's future in long-range maritime patrol.

"Today's MMA decision represents an important milestone for the warfighter and the acquisition team," said John Young, assistant secretary of the Navy for research, development and acquisition. "Our P-3 fleet has made major contributions to operations in Afghanistan and Iraq while also performing their core maritime mission. It is becoming urgent to replace the P-3 with a new airframe and the enhanced capability offered by MMA. Both industry teams produced high quality proposals, and the acquisition team has worked with industry to make a good decision, on schedule."

"MMA offers a modern, highly reliable airframe that will be equipped with improved maritime surveillance and attack capability, allowing a smaller force to provide world-wide responsiveness while potentially on a smaller support infrastructure," said Young.

MMA will be a key component in the Navy's Sea Power 21 Sea Shield concept by providing persistent anti-sub-marine and anti-surface warfare capabilities, supporting Sea Power 21's Sea Strike doctrine through provisions of intelligence, surveillance, and reconnaissance capabilities. The platform will also play a key role in the Navy's FORCEnet architecture via development of the common undersea picture. These operational capabilities will be key factors in providing a sustained forward presence, sea domination, and distributed and networked intelligence.

For more information, please contact Navy Public Affairs at (703) 697-5342.



An artist's rendition of the Boeing 737 Multi-mission Maritime Aircraft, a derivative of the next-generation 737-800 with increased gross weight capability. Boeing won a \$3.89 billion contract from the U.S. Navy to build seven test planes over the next eight years.

Photo courtesy Boeing Media

ARMY NEWS SERVICE (JUNE 16, 2004) SOLDIERS SOON TO GET SIDE PROTECTION ON BODY ARMOR

ASHINGTON—Deployed troops will soon start getting side protection for their Interceptor Body Armor (IBA), thanks to the efforts of Program Executive Office Soldier. The IBA Deltoid Extension was one of dozens of pieces of equipment PEO Soldier officials showed off to the Pentagon press corps during a media briefing June 14.

In the two years since the organization stood up, it has researched and fielded or is in the process of researching more than 350 pieces of equipment—everything from boots to parachutes to new rifles—in order to save soldier lives, improve their quality of life, and increase their effectiveness on the battlefield, said Brig. Gen. James

Moran, PEO Soldier executive officer.

"Outfitting soldiers is just as important as [acquiring] a major piece of equipment," Moran said.

At about 16 pounds, IBA is lighter than the 25-pound Vietnam-era flack jacket it replaced, and it offers better protection, Moran said. The Deltoid Extension will add about another five pounds and protects the sides of the ribcage and shoulders. However, the extension comes with a price for the soldier. Moran explained that it can limit movement and block air from circulating under the body armor—decreasing the soldier's ability to cool off in a hot environment

XM8 Carbine U.S. Army photo

"Everything we do is a balance," Moran said. "We want all soldiers to come back without any injuries. At the same time, we want them to be combat effective. Nothing can be made to be indestructible."

Despite the weight of IBA, Moran said he has no doubt that the new body armor has saved lives. In the past 18 months, the Army has purchased about 300,000 full sets of IBA.

The current Army budget buys 50,000 Deltoid Extension sets this fiscal year, all of which will be shipped to selected troops by the end of September, according to Col. John Norwood, program manager for PEO Soldier–Equipment. The Army plans to request enough funding in next year's budget to equip all 132,000 soldiers in the Central Command area of operations with the extension

"We have a clever enemy, an adaptable enemy, so we must be clever and adaptable," Moran said.

Another piece of equipment PEO Soldier showed off is the Microclimate Cooling System now in use by Army aviation flight crews. The system is a liquid-filled vest worn next to the skin that is connected by a flexible tube to a 12-pound box that circulates the coolant. A quick disconnect allows users to move around the aircraft as necessary, and a rheostat allows users to control the coolant temperature.

PEO Soldier tests of the system have demonstrated that flight crews can increase flight times from 1.5 hours in a hot environment to about five hours, Moran said.

The third piece of equipment PEO Soldier demonstrated was the XM8 rifle. While the XM8 still faces four more formal tests before the decision is made whether to buy it, Moran said the special forces soldiers and other troops who have tried it out all said they want it now.

There are three variants of the XM8: a light version with a collapsible stock and a 9.5-inch barrel, a standard version with a 12-inch barrel, and a designated marksman version with a 20-inch barrel. While a longer barrel means greater weight, it also means greater accuracy over greater ranges and a higher rate of fire, Moran explained.

In addition to being lighter than the M16 and M4 rifles, the XM8 has the advantage of being easier to maintain with significantly lower problems with stoppages. The first XM8 tested fired 15,000 rounds without cleaning or lubrication, without a first misfire, said Col. Michael Smith, program manager for PEO Soldier–Weapons.

The last new type of rifle the Army has bought was the M16 in the 1960s, Moran said.

If the XM8 passes its remaining tests and the decision is made to buy it, the Army will likely purchase about 8,000 next fiscal year to equip two units of action, Moran said.

AMERICAN FORCES PRESS SERVICE (JUNE 16, 2004)

FUTURE MEDICAL SHELTER PROTOTYPE SET UP AT FORT DETRICK

Karen Fleming-Michael

ORT DETRICK, Md., June 16, 2004—A telemedicine test bed here welcomed a new, green neighbor May 25 when a boxy prototype of the Army's Future Medical Shelter System (FMSS) arrived from Tennessee.

Encased in a standard shipping container, the $8 \times 8 \times 20$ foot shelter is essentially a new operating room in a box for a combat support hospital that can be ready for patients in as little as a half hour, said Steve Reichard, program manager for the shelter at the U.S. Army Medical Materiel Development Activity (USAMMDA) here.

"This is a potential replacement for the ISO container portion of the DEPMEDS (Deployable Medical System) for the combat support hospital, which we knew we needed to replace," he said. "The whole concept here is you've got everything packed inside the ISO container, and you push a button, and it opens."

The container really does expand at the push of a button. After the power switch is hooked up to a 24-volt battery—which any standard military vehicle will have—and a green button is pressed, the container geometrically morphs into three shapes: a box to a triangle to a rectangle in one minute and 37 seconds.

"It looks like a cicada coming out," said Mark Arnold, an engineer with USAMMDA who has been working on the FMSS concept for more than two years.

Having a shelter set up that quickly is a real improvement over the current shelter that is contained in two ISO containers. Reichard said.

"[For that system to be operational,] you've got to manually unfold the existing container, which takes a fair amount of time, and then you've got to physically unload all of the stuff from one ISO container into one like this one," he said. "I'm not going to say that you can get everything that's in the support container into this new ISO container, but you can get a whole lot more in here than you can currently."

Prototypers from Y12 National Security Company at the Oakridge Reservation in Tennessee developed the ISO container that Reichard and Arnold, along with others from Detrick, got to see inside and out during a morning demonstration May 26.

"We started with a clean sheet of paper," said Duane Bias, the Tennessee project manager for the prototype since the program started in June 2000. "It wasn't like we could take an original design and modify it to suit our needs [and] then go on and build. We spent quite a bit of time just wrestling with requirements."

The new ISO prototype also offers users protection from chemical and biological agents, something the current DEPMEDS ISO can't offer without extra labor and supplies. "It's pretty tight once you get the environmental control units hooked up to it, and it uses positive air pressure to keep everything out," Bias said.

Though the container's weight is 1,200 pounds over its goal of 15,000 pounds, Bias is certain his team can meet that target.

"We were hoping to be under 15,000. That sounds like a lot, but it's really not when you're talking about the capability you have on the ground and the fact that a stock ISO container alone weighs 6,000 pounds," he said. "When we add equipment and supplies, we'll add more weight, but I think we've identified enough stuff to take out of there that we can be under 15,000."

In addition to the Tennessee company, two others, Mobile Medical in Vermont and EADS Dornier in Germany, have taken on the task of creating their versions of the Army's future mobile operating suite in an ISO container. Reichard said the final ISO container for the Future Medical Shelter System likely will be an amalgam of the three prototypes.

"We plan to evaluate all three of them and will probably end up saying we like A, B, and C from this one and D, E, and F from this one for the final version," he said. Keeping with the theme of three, the improved surgical suite in the ISO container is one of three components that make up the entire Future Medical Shelter System program.

The other two are a vehicle the U.S. Tank-Automotive and Armaments Command is developing that can carry the container, and new tents that use air beam frames and are lighter and easier to set up.

During the morning's demo at Detrick, engineers involved with the shelter strolled around the shelter prototype like auto show attendees, asking its developers, Duane Bias, Lee Bzorgi, and Terry Brown, about the hydraulic system, the air-handling system, and the equipment.

Once the container expanded to three times its initial width, Brown and Bzorgi glided the supply containers across the linoleum floor to their proper places and set up the surgical equipment so users would get accustomed to the process.

"We're here to show troops how to use it and actually train them on the operation of it," Bias said.

Curtis Callender, Tony Story, and Neal Batdorf all maintain the Telemedicine and Advanced Technology Research Center's (TATRC's) Forward Deployable Digital Medical Treatment Facility. The FD-DMTF, as it's called, is a medical technology test bed that, for the foreseeable future, will be connected to the new container and serve as its keeper. "They needed a place to store

it, and we're always interested in new equipment. We had the space and they had the equipment, so it worked out perfect for us," Callender said.

For example, he said, Story has been considering changing the testbed's lighting to the type of lights the prototype uses to see how they will work with the digital shelter. This adjacent placement of the shelter with the FDDMTF will let the team evaluate the light-emitting diode lights firsthand without having to purchase them first.

The new container is in good hands with Callender, who grilled the Tennessee team on how to take care of it. "It's always a learning experience. Every new piece of equipment requires new care, so you have to stay flexible," he said

Callender especially focused on how well the container would fare during harsh weather, because fierce thunderstorms rolled through the night before the demonstration, prompting a tornado warning for the area. He takes his tents seriously and even drove from Detrick to Pennsylvania to sleep in them during Hurricane Isabel to make sure they weathered the storm.



Army Maj. Gen. Lester Martinez-Lopez, commander of the U.S. Army Medical Research and Materiel Command and Fort Detrick, Md., visits the prototype of the Army's Future Medical Shelter System May 26 and speaks with Steve Reichard, center, and Tony Story about its future.

Photo by Dave Rolls

"I'd like to be able to leave it up in the weather," he said, "because they don't get to take these things down in Iraq. But since this is a prototype and hasn't been finalized, I wouldn't expect the ISO to take it without adaptations."

Reichard said the prototype's new home with the TATRC team will help come up with suggestions for the next version of the shelter.

"TATRC is doing a lot of work on future deployable medical systems, so we figured this was a good fit because this is a future medical system," he said. "Hopefully they can give us a lot of feedback on what they like and what needs improvement."

As users set up the shelter, their wish lists began to form for the next version they'd like to see. However, Congress initially funded the program, and no additional money has been appropriated for the second prototype. If money does become available, Bias said, his team wants "to get the good, the bad, and the ugly on this one" to make improvements.

Fleming-Michael is a staff writer for The Sentinel at Fort Detrick. Md.

AIR FORCE PRINT NEWS (JUNE 24, 2004) **HEARING HIGHLIGHTS AIR FORCE CONTRACTING EXPERTISE**

Tech. Sgt. David A. Jablonski, USAF

ASHINGTON—Air Force contracting expertise, deployed worldwide as part of air and space expeditionary force (AEF) packages, significantly contributes to overall success of the Defense Department missions, the service's top acquisition official said.

Dr. Marvin R. Sambur, assistant secretary of the Air Force for acquisitions, testified June 24 before the House Armed Services Committee subcommittee on readiness. Michael W. Wynne, principal deputy undersecretary of defense for acquisition and technology, led the testimony, He was accompanied by Sambur; John J. Young Jr., assistant secretary of the Navy for research, development and acquisition; and Tina Ballard, deputy assistant secretary of the Army for policy and procurement.

"Air Force contingency contracting expertise is in high demand across the department with our officers leading joint contingency contracting operations in the Balkans, Afghanistan, and Iraq," Sambur said. "The Air Force team has a solid track record in this area, one we can all be proud of."

In 2003, the Air Force sent more than 400 contingency contracting officers to 58 locations worldwide. So far this year, 117 have deployed to 24 locations. Contingency contracting officers deploy as part of AEF packages. Once in place, they hire local nationals to provide warfighters with myriad local supplies and services, Sambur said.

This approach significantly reduces the size, or footprint, of the deployed force because the supplies and services along with the infrastructure to support them, do not have to come along for the ride, he said. Within U.S. Central Command alone, Air Force contingency contracting officers have performed more than 11,000 contracting actions worth more than \$120 million through April.

Subcommittee Chairman Rep. Joel Hefley said the focus of the hearing was on the range of services purchased with the \$76.2 billion (for services) and the management and oversight of these services.

"Many of the questions the members have today came to light as the use of contractors in Iraq became apparent," Hefley said. "The subcommittee is interested in how the department procures such services, the policy on management and oversight, and whether the department should change some of these policies."

In fiscal 2003, DoD officials procured about \$209 billion in equipment, items and services. Of this amount, \$90.5 billion was for supplies and equipment, \$76.2 billion for services, \$33.1 billion for research and development, and \$9.2 billion for construction.

The committee focused primarily on the lessons learned from Iraq with respect to the use of contractors on the battlefield. Although the questions were directed toward Wynne and Ballard, Sambur pledged continued support.

"We are committed to work closely with [the secretary of defense's office] and Congress to make whatever corrections are necessary," Sambur said.

Michael Wynne
Acting USD(AT&L)
Before the House Armed Services
Committee—Subcommittee on Readiness
(June 24, 2004)

"Why does the department contract for support? Using the support provided by contractors extends the capability of the DoD civilian and military workforce, and it allows the department to focus upon its primary mission of defending the nation and safeguarding our freedom."

"Contracting can enable the department to access technology and capabilities that would have been unavailable, would take an inordinate amount of time to develop in-

would take an inordinate amount of time to develop internally, or would be prohibitively expensive to develop."

"Accessing commercially available capability makes sense and ensures that we stay ahead of our adversaries."

"Even as we buy smarter, today's acquisition professionals must work harder than ever to manage rising funding requirements, to execute a growing number of contracting actions, and to administer an expanding range and volume of complex acquisitions, including performance-based contracting and services acquisition."

"While the AT&L workforce has been shrinking, we continue to place greater demands on our workforce. To help meet this demand efficiently, we contract for project planning and support as specific needs arise. This is just one example of how the department leverages contractor support to meet mission requirements."

"I want to thank the contractors who support us abroad for their courage under fire ... numerous contractor personnel have died for their country, and we appreciate and remember their ultimate sacrifice."

IN THE NEWS



Troops at Eglin AFB, Fla., stand back as the Scout robotic vehicle fires pepper spray during a demonstration June 22. The robot is also armed with an M-16A2 rifle, which is controlled from a remote location. U.S. Air Force photo by Gary Emery

AIR ARMAMENT CENTER PUBLIC **AFFAIRS (JUNE 25, 2004)** ROBOTIC WARRIORS DISPLAY CAPABILITIES

Tammie D. Erazo

🖣 GLIN AIR FORCE BASE, Fla. (AFPN)—Pentagon officials and guests were treated to a demonstration of the remote detection challenge and response, or REDCAR initiative June 23.

REDCAR uses unmanned robotic platforms to provide perimeter defense of Air Force bases and forward-deployed units.

"With REDCAR we can integrate a family of robots to secure an airfield and take the warfighter out of the initial line of attack," said Capt. Adolfo Meana, chief of the Force Protection Battlelab's concepts division at Lackland Air Force Base, Texas. "The forces are kept in reserve to tactically move against the enemy. We put the robots in danger first and save troops' lives."

Using a laptop computer, operators control the robots from a safe location such as an armored vehicle. They are able to manage many robots at the same time and can even pass control between operators.

Battlelab and Air Force Research Laboratory workers developed the REDCAR family of robotic vehicles.

The proof of concept demonstration included three robotic vehicles. The first was Scout, a rough-terrain vehicle that travels at up to 20 mph using preprogrammed navigation and obstacle avoidance. The Scout controller can issue voice commands to people it encounters through its Phraselator

"Scout has up to 57 preprogrammed languages and can issue such police phrases as 'halt, drop your weapon,' etc.," Captain Meana said. "However. we hope controllers will be able to speak directly through the Phraselator in the future."

The Mobile Detection and Response System

(MDARS) is another robot. It provides area surveillance and detects threats, with Scout acting as an interceptor.

The third robotic vehicle, called Matilda, is a small-scale, tracked vehicle that can be carried on MDARS. Matilda provides reconnaissance in limited-access areas, including under vehicles, aircraft, and inside buildings.

"The challenge is getting all the robots to work together," said Walt Waltz, the laboratory's chief of robotics research at Tyndall AFB, Fla. "Communication between the robots is key."

During the demonstrations here, all three robots demonstrated scenarios. In one scenario, Scout detected and confronted an intruder trying to gain unauthorized access to the flightline. After the intruder refused to obey commands issued by the controller, he was disabled with a pepper spray system mounted on Scout. Another scenario featured Scout and MDARS detecting and defending against a guerrilla force trying to attack the base. During the attack, Scout used a precision-targeted M-16A2 rifle controlled from a remote location. Toward the end of the attack, Matilda was released from MDARS to search for attackers hiding in culverts.

Staff Sgt. Miguel Jimenez, assigned to the 325th Security Forces Squadron at nearby Hurlburt Field, is excited about the new technology.

"It will help out a lot having the robotic platforms alerting us to possible hostilities. It will provide an immediate visual assessment before we get there, and we can use the weapon if necessary," Sergeant Jimenez said.

IN THE NEWS

DEPARTMENT OF DEFENSE NEWS RELEASE (JUNE 21, 2004)

2004 TRAINING TRANSFORMATION IMPLEMENTATION PLAN APPROVED

he Department of Defense announced today that Deputy Secretary of Defense Paul Wolfowitz approved the 2004 DoD Training Transformation Implementation Plan (IP) to better enable joint operations. This replaces the 2003 plan as a result of the department's experience in transforming the force and from lessons learned during operations in the Global War on Terrorism.

This plan updates guidance, direction, and implementing instructions to achieve the secretary's vision of providing dynamic, capabilities-based training for the Department of Defense in support of national security requirements across the full spectrum of service, joint, interagency, intergovernmental, and multinational operations.

The three tenets for a transformed force are the Joint National Training Capability (JNTC)—training for units, staffs, and joint task forces; the Joint Knowledge Development and Distribution Capability—joint training for individuals; and the Joint Assessment and Enabling Capability—the evaluation of our efforts to transform the department's training programs.

"This document was developed using feedback from the initial JNTC event in January; collaborative efforts with the Joint Staff, the Services, U.S. Joint Forces Command, and the combatant commanders; and real world operations and experience from Operations Iraqi Freedom and Enduring Freedom," said Deputy Under Secretary of Defense (Readiness) Paul W. Mayberry. "The 2004 IP will ensure that through T2 (Training and Transformation), the combatant commanders (COCOMs)—the ultimate focal point for joint operations—receive better prepared joint forces. In particular, the IP will help us to add the appropriate joint context to tactical and operational level training events and mission rehearsal exercises, supporting COCOM's joint operations."

"This plan updates our path to reach the ultimate goal of training transformation: no individual, no unit, no staff will ever deploy without first having experienced the rigors and stress of their joint duties in a robust and realistic training environment "said Mayberry.

The under secretary of defense for personnel and readiness has overall responsibility for transforming DoD training. Senior department civilian and military leaders of

the T2 Executive Steering Group and T2 Senior Advisory Group assist him.

For more information about T2, refer to http://www.t2net.org/ . The 2004 Training Transformation IP has been posted at the same site.

AMERICAN FORCES PRESS SERVICE (JUNE 23, 2004) BATTLEFIELD METRICS KEY IN TRANSFORMATION EFFORT

K.L. Vantran

RLINGTON, Va.—DoD needs to be organized according to the metrics used on the battlefield, said the director of the Defense Department's Office of Force Transformation here June 22. This includes organizational change as well as change in equipment, retired Navy Vice Adm. Arthur K. Cebrowski told military and industry officials at the Joint Warfare: Transformation and New Requirements conference.

Commanders have always been concerned with three critical areas on the battlefield—communications, intelligence, and logistics—that are key in the military's transformation journey. There must also be a shift in focus, noted Cebrowski. "We have to be more than responsive," he said. "We have to be preventative. We must also realize it's not just stopping an event. Rather, it's a 24-7 job—just ask the troops in Iraq. It's about keeping the world system up and running."

Homeland security, noted the admiral, is not something that should be left for police departments anymore. The United States, he continued, has always been strategically defensive. But by virtue of geography and the types of threats, the nation has been operationally offensive. Change, said Cebrowski, will be "hard for us. We believe in defending ourselves by going on the offense."

"We're the ones who create surprise for others," he added. "Now, the concern is the other way around. How do we avoid strategic surprise?"

Cebrowski said part of the answer lies in taking a look at metrics and ensuring they are both appropriate to the age and relevant for the times.

"We are in rapidly changing times, with an enormous degree of uncertainty," he said. "Because the threat is diverse, there is a great benefit to be able to create and sustain options. This means to give up the notion of the 'one best' system."

DEFENSE ACQUISITION EXECUTIVE OVERVIEW WORKSHOP

CRASH COURSE IN ACQUISITION FOR SENIOR EXECUTIVES

Collie J. Johnson

t the Defense Acquisition University (DAU) the job of course manager is inherently full of complex and demanding challenges in analyzing the needs of students and matching them against available resources. And that job becomes particularly formidable when an element of the unknown is factored into the equation.

Consider this real-time directive: design a "tell me everything I need to know about acquisition" course with only 24-hours' notice, duration unknown, number of participants unknown, and curriculum unknown. Tailor the curriculum to the individual(s), who are flag officers or Senior Executive Service (SES)-level civilians. Find the right resources and faculty to present the course and help them juggle their own schedules and commitments to teach the course. In short, forget about establishing a regular course schedule or budget—the course will be taught and funded as the need arises.

Almost by Accident

Dr. Bob Burnes, Defense Acquisition Executive Overview Workshop (DAEOW) course manager, has managed the impossible for over eight years now with remarkable results. In fact, June 16-18 marked the 100th offering of the DAEOW—a course that started almost by accident.

In January 1995 a certain political appointee was told that he needed to go somewhere and find out about this thing called "defense systems acquisition." The "somewhere" he selected was the Defense Systems Management College (now a campus of the Defense Acquisition University). The school put on a special one-time-only short course—two days—with everything he needed to know about acquisition. DAU West Region Dean Andrew Zaleski, then head of DAU's Academic Programs, put it together and delivered it with his staff and other members of the faculty.

Zaleski was expecting the political appointee and three or four of his lieutenants. Instead, 25-30 of his staff showed up.

Over the years, the course has spanned the gamut from one to 15 people. "I think the best interchange and learning," Burnes notes, "occurs when the boss is there—the general officer or commander along with the chief of staff." He explains that when two are firing questions at

The Defense Acquisition
Executive Overview
Workshop (DAEOW) program
provides senior executives
with current, pertinent
information, specifically
tailored to meet their
particular needs as decision
makers in the ever-changing
environment of the DoD
acquisition community. The
program further serves as a
career-long resource for
acquisition-related
continual learning.

the instructors, that interchange provides two perspectives because obviously the chief of staff has a different job from that of the commander.

Starting in September 1995, six months after the political appointee and his staff completed the first DAEOW, folks started calling and coming. The Services have all sent senior executives through DAEOW. Today, over 175 students have completed the course.

Not Necessarily a One-Time Shot

"Because it's so tailored," says Burnes, "you could call it consulting. You could call it continuing education. It's quite possible people could come back several times. In other words, if they go into an assignment in contract-

ing and don't know enough about contracting, they attend; then the next assignment is logistics, and if they don't know enough about logistics, they come back. This is not necessarily a one-time shot."

Naturally the course has evolved over the years to encompass globalization and the many changes in the acquisition process brought about by acquisition reform, but the original intent remains remarkably the same: give busy senior executives a crash course in acquisition, make it relevant, and make it intensive.

Three unique features mark the course: no canned curriculum, no schedule, and no set duration. However, Burnes notes that most courses run from one-half to two days with as few as one or as many as five students. He normally starts out by faxing students

a quick survey covering all the acquisition areas. Working with each executive's point of contact, they jointly develop a curriculum, sending it back and forth for further refinement. The final curriculum, he says, determines the length of the course. Once the dates are agreed upon and finalized, Burnes then schedules faculty experts to present the class.

"So far, with only two exceptions, we've been able to address all the requested topics using our own faculty," says Burnes. "We've had the right expertise, and it was available at the right time. But if DAU doesn't have the expertise," Burnes adds, "we'll find it." On two occasions he brought in an expert from DoD. "So that's another pool of expertise," he noted.

"No" Not an Option

Burnes views requests for the workshop as requests that "we [DAU] cannot afford to turn down—no matter what the situation." He notes that there's no tuition involved; the only expense to the organization or participant is TDY expenses.



DAEOW Course Manager Dr. Bob Burnes (left) conducts a session of the Defense Acquisition Executive Overview Workshop for Marine Col. R. E. White, assigned to Marine Corps Systems Command (center), and Marine Col. Slade Brewer, who requested the course after assuming duties as commander, Marine Corps Operational Test & Evaluation Activity.

Demand for the course has never stopped. And Burnes is confident the course will remain a part of the DAU curriculum in years to come. "People need to know that there's something a little different down here," he says. "A little more specialized, one-on-one desk-side discussion, that will bring them up to speed quickly in areas where they are lacking—through no fault of their own—particularly if they've taken on responsibilities they have not had an opportunity to experience."

Burnes calls DAEOW a "fire hose of information, experiences, and lessons learned." It's something he is confident students can grasp quickly in a few days from experts, so that they have some idea of what they're facing and where others have been before them.

To inquire about DAEOW, contact Burnes at (703) 805-4563, DSN 655-4563, Fax (703) 805-3201, or by e-mail at bob.burnes@dau.mil.

Johnson is editor-in-chief, Defense AT&L.

HOWARD UNIVERSITY AND DEFENSE ACQUISITION UNIVERSITY FORM STRATEGIC PARTNERSHIP

he Defense Acquisition University and Howard University have established a strategic partner-ship agreement to provide educational opportunities to defense workforce personnel through a certificate program in Supply Chain Management (SCM). Under the agreement, students will be offered the same courses in the certificate program that are offered to Howard University MBA students who major ("concentrate") in SCM.

AT&L students who have taken any one of the following courses will be allowed to transfer one of these courses into the Howard University certificate program:

- ACQ 201 Intermediate Systems Acquisition Course
- PMT 301 Program Management Course
- PMT 302 Advanced Program Management
- PMT 352 Program Management Office Course.

For more information, visit the Howard University Supply Chain Management Certificate program Web site http://www.bschool.howard.edu/scm/Certificate/default.htm or call 202-806-1725.

DOD LIST OF FORCE TRANSFORMATION CASE STUDIES

n March 31, 2004, the Defense Department's Office of Force Transformation commissioned a number of "case studies" to determine the military's ability to conduct network-centric operations. Several are due to be completed during the summer of 2004. Others, focused on operations in Iraq and Afghanistan, are scheduled for February 2005.

Case Studies

To date, one case study is complete, six are ongoing, and four are planned. The six ongoing case studies are scheduled to be ready for final review in July, 2004. The four planned case studies have a tentative completion date of February, 2005.

COMPLETED

Air-to-Air Mission

This case study explored in detail the increased mission effectiveness that USAF F-15Cs employing data links achieved in comparison to F-15Cs using voice only communications. This case study is currently available in PowerPoint format only.

ONGOING

These case studies are supported by a select team of scientists, engineers, and military operators from throughout the international defense community.

Command and Control of Networked Forces: CTF-50 During Operation Enduring Freedom

This case study explores how Commander, Task Force 50 (CTF-50) during Operation Enduring Freedom employed innovative, network-enabled C2 capabilities. Phase I of this case study is complete. A draft final report has been developed and is currently out for review and comment. In December, 2003 the case study findings were briefed to Navy Rear Adm. Zelibor, commander of Task Force 50. He concurred with the findings and approved this case study for general distribution. Final draft is currently under review.

Special Operations Forces

This case study explores how Navy Special Warfare Group One is employing network-centric warfare capabilities in support of Operation Enduring Freedom, Operation Iraqi Freedom, and the Global War on Terrorism.

Air-to-Ground

This case study explores the impact to date of the deployment of a variety of networking and digitization technologies by air and ground forces on the Air-to-Ground mission. Data for this case study draw from tests, exercises, and combat operations in Operation Enduring Freedom and Operation Iraqi Freedom.

Ground Maneuver–Stryker Brigade Combat Team

This case study explores how the U.S. Army's Stryker Brigade Combat Teams combine advanced networked enabled C2 capabilities and innovative tactics, techniques, and procedures to improve mission effectiveness.

Coalition Network Centric Operations during Operation Iraqi Freedom

This case study examines how U.K. Ground Forces employed network-enabled Blue Force Tracking Capabilities during Operation TELIC (U.K. support to Operation Iraqi Freedom). This case study is a collaborative effort between the DoD Office of Force Transformation and the U.K.Ministry of Defence and is co-funded by both departments.

Network Enabled Coalition Military Operations

This case study investigates the impact of network-enabled C2 capabilities on coalition military operations by examining in depth the insights and lessons learned by:

- ACE (Allied Command Europe) Mobile Force (Land) during employment of Immediate Reaction Task Force (Land)
- Multi-national forces during NATO Operation Amber Fox, which facilitated the first democratic elections in Macedonia
- 1st German Netherlands Corps operating as International Stabilization Force 3 in Afghanistan.

ONGOING

These case studies are currently ongoing with a tentative completion date of February 2005.

Networked Air-Ground Operations: Operation Iraqi Freedom

This classified case study examines how networked air, Special Operations, and ground forces operated in Western Iraq during Operation Iraqi Freedom.

Ground Maneuver: V (U.S.) Corps and 3rd (U.S.) Infantry Division in Operation Iraqi Freedom

The U.S. Army War College's Center for Information in Warfare will perform this case study on how the V (U.S.) Corps and 3rd (U.S.) Infantry Division employed network-enabled C2 capabilities during Operation Iraqi Freedom.

Application of Network Centric Operations in Stability and Restoration Operations

This case study examines how network-centric operations can support stability and restoration operations.

PLANNING PHASE

Application of Network-Centric Operations in Crises Management: Insights from the Asian SARS Crisis

This case study, conducted in collaboration with the Singapore Ministry of Defence, explores how the Government of Singapore employed network-centric operations concepts in dealing with the outbreak of SARS in 2003.

Networked Based Defense: Strategic Analysis of Information Age Transformation

This case study examines how Sweden's leadership apply the concepts of network-centric operations to size, shape, and change their armed forces to more effectively deal with the challenges of the information age. This case study will be performed in collaboration with the Swedish Ministry of Defense.

Editor's note: To learn more about the programs/initiatives of DoD's Office of Force Transformation, visit the

Office of Force Transformation Web site at http://www.oft.osd.mil/>.

NAVAL AIR SYSTEMS COMMAND (NAVAIR) ACQUISITION GUIDE

he January 2004 NAVAIR Acquisition Guide, 19th edition, is readily available at two frequently used acquisition community Web sites: http://www.ntsc.navy.mil/Resources/Library/Acqguide/Acqguide.htm and http://akss.dau.mil . This latest edition identifies the key activities and critical documentation required for naval aviation acquisition and puts these requirements in a concise, maintainable, and easy-to-use format to help program managers, integrated product teams, and naval aviation senior leadership in planning their programs and ensuring timely obligation/expenditure of funds budgeted.

NAVAIR members are encouraged to use the guide as a ready reference, and to make constructive comments for continual improvement to the *NAVAIR Acquisition Guide* manager. Send comments and suggestions to the NAVAIR Training Systems Division, Acquisition Support Team: www.ORLO_OrlAcquisitionGuide@navy.mil>.

ACQUISITION SUPPORT CENTER PUBLISHES HANDBOOK ON "ACQUISITION CAREER MANAGEMENT ADVOCATES"

he U.S. Army Acquisition Support Center (ASC) at Fort Belvoir, Va., has published a fiscal 2004 Acquisition Career Management Advocates (ACMA) Handbook to provide the tools needed to help ACMAs communicate with and support the workforce and ASC. This is the first tool of its kind to be developed especially for the ACMA's interests and needs. It covers a variety of ACMAspecific topics including



roles and responsibilities and the tools

available to the ACMA to help accomplish tasks. It is designed to be a desktop reference. The handbook is only available on the ASC Web site at < http://asc.army.mil/pubs > . Updates will be made periodically.

UNIQUE IDENTIFICATION (UID) MANDATORY ON DOD SOLICITATIONS

nique Identification (UID) is a mandatory Department of Defense (DoD) requirement on all solicitations issued on or after Jan. 1, 2004. The DoD Guide to Uniquely Identifying Items and other relevant UID materials including policy memoranda can be found at http://www.acq.osd.mil/uid or http://www.uniqueid.org. The Defense Acquisition University (DAU) has developed UID program training that is available via on-site presentation. To request DAU training, send an e-mail to uidprogramtraining@dau.mil.

NDIA TO SPONSOR DEFENSE SYSTEMS ACQUISITION MANAGEMENT COURSE OFFERING FOR INDUSTRY MANAGERS

he National Defense Industrial Association will sponsor an offering of DAU's Defense Systems Acquisition Management (DSAM) course to interested industry managers Nov. 29–Dec. 3 in Orlando, Fla. DSAM uses the same acquisition policy information provided to DoD students who attend the Defense Acquisition University courses for formal acquisition certification. It is designed to meet the needs of defense industry acquisition managers in today's dynamic environment, providing the latest information related to:

- Defense acquisition policy for weapons and information technology systems including discussion of the new DoD 5000 series (directive, instruction, and guidebook)
- Defense acquisition and logistics excellence initiatives
- Defense acquisition procedures and processes
- The planning, programming, and budgeting system and the congressional budget process
- The relationship between requirements generation, resource allocation, science and technology activities, and acquisition programs.

For further information, contact Christy O'Hara (703) 247-2586 or e-mail cohara@ndia.org. Prospective government students must first contact Air Force Maj. Jim Ashworth at (703) 805-5809 or e-mail james. ashworth@dau.mil.

OVERVIEW OF USD(AT&L) CONTINUOUS LEARNING POLICY

cquisition personnel in Defense Acquisition Workforce Improvement Act (DAWIA) billets who are certified to the level of their position must earn 80 continuous learning "points" to meet Continuous Learning Policy requirements issued by the USD(AT&L) on Sep. 13, 2002. Continuous learning aug-

ments minimum education, training, and experience standards. Participating in continuous learning will enhance your career by helping you to:

- Stay current in acquisition functional areas, acquisition and logistics excellence-related subjects, and emerging acquisition policy
- Complete mandatory and assignment-specific training required for higher levels of DAWIA certification
- Complete "desired" training in your career field
- Cross-train to become familiar with, or certified in, multiple acquisition career fields
- Complete your undergraduate or advanced degree.
- Learn by experience
- Develop your leadership and management skills.

A point is generally equivalent to one hour of education, training, or developmental activity. Continuous learning points build quickly when you attend training courses, conferences, and seminars; complete leadership training courses at colleges/universities; participate in professional activities; or pursue training through distance learning. Continuous Learning points are assigned to distance learning courses < http://clc.dau.mil > based on their academic credits or continuing education units. Other activities such as satellite broadcasts, viewing a video tape, listening to an audio presentation, or working through a CD-ROM or Internet course can earn continuous learning points on a 1 point per 1 hour of time devoted to that activity. On-the-job training assignments, intra- and inter-organizational, rotational, broadening, and development assignments may also qualify toward meeting the continuous learning standards.

INTERACTIVE DOD 5000 SERIES DOCUMENTS

he Defense Acquisition University has activated an interactive DoD 5000 Web site as a useful tool intended to allow users to easily navigate among the following three interactive DoD 5000 series documents: DoD Directive 5000.1, DoD Instruction 5000.2, and the *Defense Acquisition Guidebook*.

The interactive DoD 5000 documents at http://dod5000.dau.mil/dod5000%20instructions.htm contain internal and external links to sources of information based on subject matter and topic areas, and are integrated with the AT&L Knowledge Sharing System (AKSS) and Acquisition Community Connection (ACC) Web sites at http://deskbook.dau.mil/jsp/default.jsp and http://acc.dau.mil/simplify/ev_en.php respectively.

U.S. ARMY HUMAN RESOURCES COMMAND, ALEXANDRIA, VA. ARMY APPROVES RECOGNITION OF PROFESSIONAL LOGISTICIAN CERTIFICATION

ffective April 15, 2004, Army officers/warrant officers in any branch/specialty who have been awarded the designation "Certified Professional Logistician" (CPL) by The International Society of Logistics (SOLE) are authorized to add their CPL certification to their Officer Record Brief (ORB) and Official Military Personnel Folder (OMPF). This change to AR 600-8-104, Military Personnel Information Management/Records authorizes the inclusion of the CPL certificate in the OMPF. The CPL joins, among others, the Certified Professional Engineer (CPE), the Certified Professional Accountant (CPA), and the Certified Professional Contract Manager (CPCM) as civilian-granted professional certifications authorized for documentation and recognition as specialized education and training. The CPL certification will be reflected in "Section X-Remarks" on the lower left portion of the ORB. Army National Guard (ARNG) CPLs can submit their certifications now to the respective state military personnel offices. All Army/Army Reserve CPLs can submit their documentation, following one of the procedures below:

Submit a notarized copy of the SOLE CPL certificate to your assignment officer at:

FOR ACTIVE ARMY

COMMANDER

U.S. ARMY HUMAN RESOURCES COMMAND ATTN: AHRC-OPC (YOUR BRANCH) 200 STOVALL STREET

ALEXANDRIA VA 22332

FOR ARMY RESERVE

COMMANDER

U.S. ARMY HUMAN RESOURCES COMMAND ATTN: ARPC-ARO-R (for AGR) or ARPC-CIS-PV (for IRR/TPU/IMA)

1 RESERVE WAY

ST. LOUIS MO 63132-5200

FOR ACTIVE ARMY ONLY

Scan and e-mail a copy of the certificate to your assignment officer. Addresses can be found on the HRC Web site at http://www.perscom.army.mil/opmd/ Branch % 20Homepages.htm > .

For any of the above procedures include your name and social security number on the side corner of the copy of the certificate. Include a note indicating your name

and social security number and state that you want CPL certification added to your OMPF. Your assignment officer will update your ORB and forward the certificate for inclusion in PERMS—the Army's Personnel Electronic Records Management System.

Questions regarding the Active/Reserve ORB/OMPF procedures should be directed to Army Maj. James Kennedy (OD), XO CSSD at 703-325-5262 or kennedj0@hoffman.army.mil. ARNG questions should be directed to the respective State Military Personnel Office. For assistance in replacement CPL certificates or questions regarding the CPL program, contact SOLE Headquarters at 301-459-8446 or solehq@erols.com.

AT&L KNOWLEDGE SHARING UPDATE ACQUISITION COMMUNITY CONNECTION TO GAIN THREE NEW SPECIAL INTEREST AREAS

earning materials, guidance, references, lessons learned, community connection, and much more can be found online at the Acquisition Community Connection (ACC) Web site. Look for the following up-and-coming new Special Interest Areas (SIAs) at http://acc.dau.mil > .

Science and Technology SIA

As the critical path to performance improvement with the potential for significant cost containment, science and technology (S&T) is an important part of the DoD budget. The S&T community is more interested in the transition of its products than in the past. With overall declining resources, the acquisition community needs to take advantage of the S&T products and must influence the S&T work in order to make it more applicable to ongoing needs. For additional information, contact the S&T editor, Dr. Bill Lukens, at bill.lukens@dau.mil.

SCIENCE & TECHNOLOGY CRITICAL PATH



Test and Evaluation SIA

Test and evaluation (T&E) is the process by which systems or components are compared against requirements and specifications through testing. The results are evaluated to assess progress of design, performance, supportability, etc. Developmental T&E is an engineering tool used to reduce risk throughout the defense acquisition cycle. Operational T&E is the actual or simulated employment of a system under realistic operational conditions by typical users. For additional information, contact the T&E editor, Dr. John Claxton, at john.claxton@dau.mil.

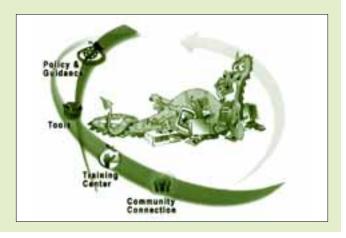
TEST & EVALUATION CRITICAL PATH



Software Acquisition Management SIA

Software acquisition management is the process of acquiring DoD software, managing its development and integration, and ensuring its supportability. The DoD needs to consider that systems are complex and cannot be developed in a single group. Requirements are complex and cannot be described in a few pages; they evolve as a result of technology, threats, and user operations concepts that are in constant flux. Users of the system are diverse and have a direct interest and impact on system requirements; end-users typically don't acquire the system, and the acquirer normally contracts with a developer in a buy-seller arrangement. For additional information, contact the software editor, Larry Baker, at larry.baker@dau.mil.

SOFTWARE ACQUISITION MANAGEMENT CRITICAL PATH



DEFENSE ACQUISITION UNIVERSITY DEPLOYS AT&L KNOWLEDGE SHARING SYSTEM (AKSS) 3.0 WITH INTERWOVEN

he Defense Acquisition University has procured and transitioned the AKSS to the Interwoven Content Management System (CMS), in a technical upgrade designed to improve the timeline for adding or correcting the content of AKSS. To the user, this means that new links and updates to golden sources, acquisition, technology, and logistics (AT&L) Web sites, training information, guidebooks and handbooks, and other menu driven content, can be added to AKSS almost instantly. Hot topics and suggested AT&L news articles can be posted to AKSS on the same day that they appear on the Web. Broken or misidentified links will be fixed or updated within minutes of discovery. The user will not see any change in the appearance or functionality of the AKSS. The new CMS capability ensures that AKSS 3.0 will remain a top resource for mandatory AT&L policy and information.

A new AKSS CD will be produced on or about August 2004. The CD will contain all of the new policy content that has been added to AKSS during the last 10 months. Additionally, DAU's fiscal year 2005 will unveil an initiative to organize, capture, and provide public access to course student materials via the AKSS. This learning material will cover all of the AT&L career fields and special interest areas. DAU's fiscal year 2005 will also herald the development of comprehensive performance support tools that will provide expert guidance and wisdom, saving all workers and agencies time and money and assisting new acquisition members in their job performance

DAU will continue to enhance the implementation of policy and best practices through a formal lessons-learned capture and online access system; the dynamic links of the DoD 5000 instructions, guidebook, and Joint Capabilities Integration and Development System (JCIDS); and the advancement of new performance support tools, in-

telligent process wizards, and product development tools based on requirements generated by users, communities, the Office of the Secretary of Defense, Services, agencies, and DAU leadership. The current, dynamic DoD 5000 documents can be accessed at http://dod5000.dau.mil Long-term plans include the creation of an end-to-end acquisition model with embedded wizards to allow accurate and timely development of statutory and regulatory required plans, reports, and other program documentation.

LEARNING ASSET INTEGRATION (LAI) INITIATIVE

he Defense Acquisition University has embarked on a major new initiative focused on providing significantly improved job performance support to the AT&L workforce. The Learning Asset Integration initiative will allow the workforce anytime/anywhere access to the principal DAU learning assets that previously have been available previously only in the classroom or through a controlled formal distance learning course.

Career-long Learning

DAU provides career-long support through the products and services offered in its Performance Learning Model (PLM). A major DAU goal is to integrate and leverage all learning assets developed by and available to DAU to maximize the value of all assets to the AT&L workforce. Learning assets range from small objects like a graphic representation of the acquisition framework, to a large online career field community of practice and its body of knowledge. Learning assets cover the spectrum from internal and external sources as follows:

- Learning objects and courses developed by DAU's authoring tools
- Classroom course presentations and information artifacts
- Continuous learning modules/courses
- Rapid deployment training assets
- Targeted training assets
- Performance support assets
- DAU and Department of Defense guidebooks and handbooks
- Policy and reference documents (in AT&L Knowledge Sharing repository)
- Database of questions and answers ("Ask a Professor" in AT&L Knowledge Sharing repository)
- Case studies, best practices, automated templates/tools
- Knowledge communities, subtopic areas, and contributed assets
- Student-developed studies, reports, and lessons learned,
- Faculty business cards with identified areas of expertise (from the human resources database)

• Advanced distributed learning repository of DoD sharable learning objects.

What is LAI and how will it be accomplished?

LAI is capturing, organizing, life cycle managing, and providing open access to a broad spectrum of learning assets in a central digital repository or repositories. An architecture of the initial Learning Asset Integration is shown to the right.

DAU is in the process of selecting and purchasing a new learning content management system that will include a robust central digital repository. The repository will be configured to accept learning assets in structures/tax-onomies that will make it easy for users to access the stored knowledge. The system will have easy-to-use templates for knowledge owners to contribute learning assets and describe them by using meta tags.

Why is LAI an imperative?

DAU believes it must integrate its learning assets to:

- Leverage and maximize the value of all DAU products and services
- Provide the most accurate and current knowledge available in all DAU products and services
- Enrich the activities and content in courses and course modules
- Minimize the cost of development and maintenance through asset reuse
- Help AT&L workers to develop career qualifications and competencies
- Help AT&L workers to stay current in their profession
- Help AT&L workers to do their jobs efficiently and in real time
- Help AT&L workers to make smart business decisions
- Support DAU's e-Learning vision and support future competency-based training.

INFORMATION TECHNOLOGY (IT) COMMUNITY OF PRACTICE

ponsored by the office of the Department of Defense (DoD) deputy chief information officer (CIO), the Information Technology (IT) Community of Practice (CoP) is focused on improving the performance of the DoD IT workforce by providing access to best practices, lessons learned, and training and guidance information in a user-centered format. By incorporating netcentric concepts into everyday work through the cultivation of an information-sharing culture across program offices, the IT CoP is helping to leverage valuable expertise across the workforce for the benefit of all.

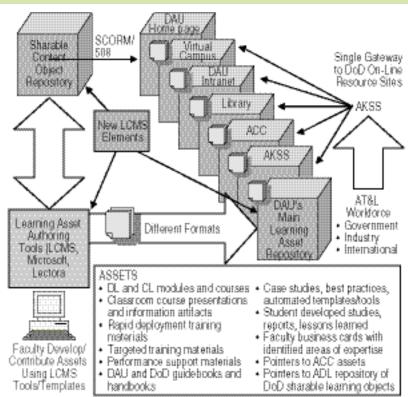
Learn While Doing

The IT CoP supports a learn-while-doing method of performance support that complements schoolhouse and distance learning. The IT Community also benefits from its collocated access to the functional communities of program management, risk, logistics, contracting, data, and systems engineering. By providing access to best practices, lessons learned, and examples that are tied to required policy and task guidance information, the IT workforce will have just-in-time access to required information.

IT CoP Growth Plan

The IT CoP is being developed by cultivating interaction within sub-communities. This evolutionary growth approach allows the IT CoP to grow as resources are provided for a particular need area. The goal is that over time, the IT CoP will become the golden source for the IT workforce. The Clinger-Cohen Act (CCA) Implementation Community is the flagship sub-community within the IT CoP. In addition to CCA, the Business Process Reengineering community has just started, and Information Assurance should come online in the next few months.

Learning Asset Integration (LAI) Through a Virtual Repository(ies) of Learning Assets and Leveraging Learning Assets for Workforce Job Support



Clinger-Cohen Act Implementation Community

The CCA Implementation Community is dedicated to collecting and disseminating information about the CCA, a law that codifies best practices for the requirements definition and acquisition of IT programs. CCA applies to all IT systems including national security systems. The thrust of the community is to move CCA from being an after-the-fact paper drill to a tool that enables high-performance program management.

The CCA Community has a number of resources to help programs, including detailed task guidance for all the DoD 5000 CCA information requirements (such as outcome-based performance measures, post-implementation reviews, and the IT Registry). Along with key guidance documents, all federal and DoD policy information is integrated into the task support. Currently the community is working on collecting examples and templates for each of the CCA information requirements.

CCA Community Meeting—Avoiding Section 8084 Pitfalls

The first CCA Community meeting was held on June 24, 2004, and addressed avoiding the pitfalls of section

8084(c). Section 8084(c) of the Appropriations Act for FY 2004 re-enacted a provision that requires the DoD CIO to certify CCA compliance for major automated information systems to the congressional defense committees at acquisition milestones. Almost 50 people attended, facilitating discussion of many issues among a mix of oversight, program, and domain personnel: when new programs should start working CCA; what to do about inadequate sponsor involvement; the difference between outcome-based performance measures from acquisition measures; and others.

Joining the IT CoP

If you are not currently a member of the Acquisition Community Connection (ACC) but are interested in joining the IT Community of Practice or CCA community, please go to http://acc.dau.mil/ and click on the "Join" link on the right side of the page. Then in the application's "Request Comment" field, indicate your interest in being a part of the new IT or CCA community. We are still looking for subject matter experts to become part of the community, so if you are interested in participating, please contact the IT and CCA CoP Community coordinator, Noel Dickover: noel.dickover.ctr@osd.mil.



OFFICE OF THE UNDER SECRETARY OF DEFENSE **3000 DEFENSE PENTAGON** WASHINGTON, D.C. 20301-3000

April 29 2004

DPAP(DAR)

MEMORANDUM FOR DIRECTORS OF DEFENSE AGENCIES DEPUTY ASSISTANT SECRETARY OF THE ARMY (POLICY AND PROCUREMENT), ASA(ALT) DEPUTY ASSISTANT SECRETARY OF THE NAVY (ACQUISITION MANAGEMENT), ASN(RDA) DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE (CONTRACTING), SAF/AQC DIRECTOR, DEFENSE CONTRACT MANAGEMENT AGENCY

EXECUTIVE DIRECTOR, ACQUISITION, TECHNOLOGY AND SUPPLY DIRECTORATE (DLA)

SUBJECT: Class Deviation—Commercial Item Omnibus Clauses for Acquisitions Using the Standard **Procurement System**

When using the Standard Procurement System (SPS) to contract for commercial items, all Department of Defense contracting activities may deviate from the requirements in Federal Acquisition Regulation (FAR) 12.301(b)(4), the clause at FAR 52.212-5, Defense FAR Supplements (DFARS) 212.301(f)(iii), and the clause at DFARS 252.212-7001.

The clauses at FAR 52.212-5 and DFARS 252.212-7001 require the contracting officer to "check a box" to identify the clauses that are applicable to the specific acquisition of commercial items. Rather than requiring the contracting officers to "check the applicable clauses," SPS has a clause logic capability that automatically selects the clauses under FAR 52.212-5 and DFARS 252.212-7001.

Contracting officers may use the SPS clause logic capability to automatically select the clauses that are applicable to the specific solicitation and contract. Contracting officers must ensure that the attached deviation clauses are incorporated into these solicitations and contracts because these deviation clauses fulfill the statutory requirements on auditing and subcontract clauses applicable to commercial items. The deviation also authorizes adjustments to these deviation clauses required by future changes to the clauses at 52.212-5 or 252.212-7001 that are published in the FAR or DFARS. This class deviation is effective on May 1, 2004, and remains in effect until April 30, 2009, or until otherwise rescinded.

> Director, Defense Procurement and Acquisition Policy

Attachment: As stated

cc: DSMC, Ft. Belvoir



Editor's note: To view the attachment, visit the Director, Defense Procurement and Acquisition Policy Web site at http://www.acg.osd.mil/dpap/>.



OFFICE OF THE UNDER SECRETARY OF DEFENSE 3000 DEFENSE PENTAGON WASHINGTON, D.C. 20301-3000

April 29 2004

DPAP/EB

MEMORANDUM FOR DIRECTORS, DEFENSE AGENCIES

DEPUTY ASSISTANT SECRETARY OF THE ARMY

(POLICY AND PROCUREMENT), ASA(ALT)

DEPUTY ASSISTANT SECRETARY OF THE NAVY

(ACQUISITION MANAGEMENT), ASN(RDA)

DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE

(CONTRACTING), SAF/AQC

DEPUTY DIRECTOR FOR LOGISTICS OPERATIONS,

DEFENSE LOGISTICS AGENCY (DLA)

DIRECTOR, ADMINISTRATION AND MANAGEMENT DIRECTOR, ARMY CONTRACTING AGENCY

SUBJECT: Wage Determinations On-Line (WDOL)

Wage Determinations On-Line (WDOL), a project within the Federal eGov Integrated Acquisition Environment (IAE) initiative, recently launched a website (http://www.dwol.gov) to provide contracting officers with "one-stop" access for Service Contract Act (SCA) and Davis-Bacon Act (DBA) wage determinations (WDs) and related contract labor information. WDOL is the result of collaboration by the Military Departments, Department of Labor, Office of Management and Budget, General Services Administration, Department of Energy, and Department of Commerce (National Technical Information Systems). Members of DoD's Acquisition Domain provided substantial effort in the design and functional engineering of the new website. The new program is expected to significantly speed procurement processes involving contract labor standards and enable federal agencies to be more consistent in the application of these laws.

A WDOL briefing dated October 2003 is available on the DoD Acquisition Domain website, http://www.acq.osd.mil/dpap/ebiz/index.htm, under the "Federal-wide Programs" section. It provides a brief description of the new WDOL website and its features. Please ensure that all contracting personnel receive a copy of this notice and access the briefing. I expect the Federal Acquisition Regulation (FAR) and the Department of Labor's Title 29 Code of Federal Regulations to be revised in the near future to implement WDOL processes.

My action officer regarding the electronic business implications of this subject is Ms. Lisa Romney, 703-614-3883, lisa.romney@osd.mil. Contact your Military Department Labor Advisor for questions regarding WDOL associated usage. Contact information for those individuals is available on both the WDOL and Acquisition Domain websites referenced above.

Deidre A. Lee

Director, Defense Procurement and Acquisition Policy



OFFICE OF THE UNDER SECRETARY OF DEFENSE 3000 DEFENSE PENTAGON WASHINGTON, D.C. 20301-3000

May 03 2004

DPAP/EB

MEMORANDUM FOR DIRECTOR, ARMY CONTRACTING AGENCY
DEPUTY ASSISTANT SECRETARY OF THE NAVY
(ACQUISITION MANAGEMENT, ASN(RDA)
DEPUTY ASSISTANT SECRETARY OF THE AIR
FORCE (CONTRACTING), SAF/AQC
DEPUTY DIRECTOR FOR LOGISTICS OPERATIONS (DLA)

SUBJECT: DOD DEPLOYMENT AND TEST OF PAST PERFORMANCE RETRIEVAL INFORMATION SYSTEM—STATISTICAL REPORTING (PPIRS-SR) PROTOTYPE

In July 2002, the Past Performance Information Retrieval System (PPIRS) became the single, authorized application providing past performance reports to the entire Federal acquisition community as a part of the President's e-Government Integrated Acquisition Environment (IAE) initiative. Building on the existing capability and furthering the initiative, the PPIRS Program is ready to test a complementary application for eventual Federal-wide use. This new effort expands functionality of the current PPIRS (http://www.ppirs.gov/). The new function, PPIRS-Statistical Reporting (PPIRS-SR), will collect contractor performance data on lower dollar threshold contracts. The DoD Guide to Collection and Use of Past Performance Information (May 2003) (accessible at http://www.acq.osd.mil/dpap/Docs/PPI_Guide_2003_final.pdf) contains guidance for the collection and use of contractor past performance information as required by the Federal Acquisition Regulation (FAR) parts 15 and 42. Implementation of PPIRS-SR will provide past performance information related to delivery and quality data on contracts under the threshold established in the existing PPIRS report card function.

We are soliciting your participation in the test of PPIRS-SR. Attachments to this memo provide background on PPIRS web application and information regarding the sources of data for PPIRS-SR, an action plan for transfer of data from existing legacy collection systems, actions for designated test sites and the application host (Naval Sea Logistics Center Detachment Portsmouth), and a contract provision to be utilized during the test. Please identify one site each to use and evaluate PPIRS-SR in source selection and best value procurements for a one-year period, and provide feedback and recommendations on its suitability and usability. Suggested sites based on prior involvement in past performance capability development are listed in Attachment 2 to this memo. The information provided via PPIRS-SR should be used in the evaluation of past performance during bid/offer evaluations at these sites.



Please provide your proposed test site and the name of your point of contact by May 14, 2004, to Stanley A. Dubowski, PPIRS Program Manager, 703-882-2188, DubowskS@ncr.disa.mil. A meeting with the points of contact will be held shortly thereafter to further delineate the planned test. My action officers for DoD's participation in the IAE initiative and past performance requirements are Lisa Romney, 703-614-3883, lisa.romney@osd.mil, and Mike Canales, 703-695-8571, michael.canales@osd.mil, respectively.

Deidre A. Lee Director, Defense Procurement and Acquisition Policy

Attachments: As stated

Editor's note: To view the attachments, visit the Director, Defense Procurement and Acquisition Policy Web site at http://www.acq.osd.mil/dpap/>.



OFFICE OF THE UNDER SECRETARY OF DEFENSE 3000 DEFENSE PENTAGON WASHINGTON, D.C. 20301-3000

May 20, 2004

MEMORANDUM FOR DIRECTORS, DEFENSE AGENCIES

DEPUTY ASSISTANT SECRETARY OF THE ARMY

(POLICY AND PROCUREMENT), ASA(ALT)

DEPUTY ASSISTANT SECRETARY OF THE NAVY

(ACQUISITION MANAGEMENT), ASN(RDA)

DEPUTY ASSISTANT SECRETARY OF THE AIR

FORCE (CONTRACTING), SAF/AQC

EXECUTIVE DIRECTOR, ACQUISITION, TECHNOLOGY

AND SUPPLY DIRECTORATE (DLA)

SUBJECT: Emergency Procurement Flexibilities

Existing laws and regulations provide considerable flexibility for acquisitions that support urgent situations and national security requirements. To ensure timely contracting support, the acquisition community needs to be aware of the options and apply the flexibilities that are most appropriate for meeting a given requirement. To that end, I would like to highlight some of the flexibilities.

A combined synopsis and solicitation can be used to reduce the time required to solicit and award contracts for commercial items. Contracting officers may treat any acquisition as an acquisition of commercial items if the supplies or services are used to facilitate defense against or recovery from nuclear, biological, chemical, or radiological attack. Acquisitions issued using the "Unusual and Compelling Urgencyz exemption under the Competition in Contracting Act are generally exempt from synopsis requirements if the Government would be seriously injured by the standard synopsis timeline. In addition, the supporting justification can be made and approved after contract award when preparation and approval prior to award would unreasonably delay the acquisition. Finally, newly enacted provisions increase both the micro-purchase threshold and the simplified acquisition threshold for acquisition that are used in support of a contingency operation or to facilitate defense against or recovery from nuclear, biological, chemical, or radiological attack. Links to additional examples of acquisition flexibilities and a matrix outlining the special emergency procurement authority are contained in the attachment.

If existing provisions preclude you from taking actions you determine necessary, I expect you to support, authorize and seek appropriate deviations, as well as provide me feedback.

My point of contact for this action is Robin Schulze. She can be reached at 703-614-1509 or robin.schulze@osd.mil.

Deidre A. Lee

Director, Defense Procurement and Acquisition Policy

Editor's note: To view the attachment, visit the Director, Defense Procurement and Acquisition Policy Web site at http://www.acq.osd.mil/dpap/>.

Attachment: As stated

FEDERAL ACQUISITION CIRCULAR 2001-24 (JUNE 18, 2004)

his document summarizes the Federal Acquisition Regulation (FAR) rules agreed to by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council in Federal Acquisition Circular (FAC) 2001-24.

INCENTIVES FOR USE OF PERFORMANCE-BASED CONTRACTING FOR SERVICES (FAR CASE 2004-004)

This interim rule amends the FAR to implement Sections 1431 and 1433 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136). Section 1431 enacts governmentwide authority to treat performance-based contracts or task orders for services as commercial items if certain conditions are met, and requires agencies to report on performance-based contracts or task orders awarded using this authority. Section 1433 amends the definition of commercial item to add specific performance-based terminology and to conform to the language added by section 1431. Contracting officers will be able to use FAR Part 12, Acquisition of Commercial Items, and Subpart 37.6, Performance-Based Contracting, for non-commercial services and treat these services as commercial services when specific conditions are met. Agencies will be required to report on performance-based contracts or task orders awarded using this authority.

DEFINITIONS CLAUSE (FAR CASE 2002-013)

This final rule revises FAR 2.201 and the clause at 52.202-1 to clarify the applicability of FAR definitions to solicitation provisions and contract clauses. The list of definitions in 52.202-1 is removed and replaced with policy stating that when a solicitation provision or contract clause uses a word or term that is defined in the FAR, the word or term has the meaning given in FAR 2.101 at the time the solicitation was issued. Certain exceptions to this policy are listed in FAR 52.202-1.

PROCUREMENT LISTS (FAR CASE 2003-013)

This final rule amends the FAR to clarify that the Javits-Wagner O'Day (JWOD) program becomes a mandatory source of supplies and services when the supplies or services have been added to the Procurement List maintained by the Committee for Purchase from People Who Are Blind or Severely Disabled.

DETERMINING OFFICIAL FOR EMPLOYMENT PROVISION COMPLIANCE-IMMIGRATION AND NATIONALITY ACT (INA) (FAR CASE 2004-009)

This final rule amends FAR 9.406-2(b)(2) by revising the responsibility for determining when a contractor is not in compliance with the Immigration and Nationality Act (INA) to include both the Attorney General of the United States and the Secretary of Homeland Security.

This rule implements Executive Order 13286 published March 5, 2003, which amended Section 4 of Executive Order 12989 published February 15, 1996.

Debarring officials may now debar a contractor based on a determination by the Secretary of Homeland Security or the Attorney General of the United States.

FEDERAL SUPPLY SCHEDULES SERVICES AND BLANKET PURCHASE AGREEMENTS (BPA'S) (FAR CASE 1999-603)

This final rule amends the FAR in order to incorporate policies and procedures for services under Federal Supply Schedules. The rule—

- Adds a definitions section
- Adds information regarding the Department of Veterans Affairs delegated authority to establish medical supply schedules
- Adds language to clarify the differences between an Authorized Federal Supply Schedules (FSS) Pricelist and an FSS publication
- Adds additional information regarding e-buy, GSA's electronic quote system for the schedules program
- Clarifies that competition shall not be sought outside the Federal Supply Schedules
- Adds language to make it clear that the contracting officer placing an order on another agency's behalf is responsible for applying that agency's regulatory and statutory requirements; and that the requiring activity is required to provide information on the applicable regulatory and statutory requirements to the contracting officer
- Adds new coverage on use of statements of work when acquiring services from the schedules
- Requires that when an agency awards a task order requiring a statement of work, that if the award is based on other than price (best value), the contracting officer shall provide a brief explanation of the basis for the award decision to any unsuccessful contractor that requests such information
- Adds language stating that the performance period of Blanket Purchase Agreement (BPA) established under

the schedules program may cross option periods on the base contracts

- Refines guidance regarding the use of governmentwide BPAs
- Adds language to require the ordering activity to document the results of its BPA review
- Adds language that encourages or reminds agencies that they can seek a price reduction at any time, not just when an order exceeds the maximum order threshold
- Adds additional language to allow for consideration of socio-economic status when identifying the potential competitors for an order
- Reinforces documentation requirements generally and adds new guidance addressing the documentation of orders for services and sole source orders
- Adds new coverage to allow agencies to make payment for oral or written orders by any authorized means, including the governmentwide commercial purchase card
- Reserves the ordering procedures for Mandatory Use Schedules section
- Clarifies the procedures for termination for cause and convenience; and
- Reorganizes and revises the subpart text for ease of use.

DESIGNATED COUNTRIES-NEW EUROPEAN COMMUNITIES MEMBER STATES (FAR CASE 2004-008)

This final rule amends the FAR to implement a determination by the United States Trade Representative (USTR) under the Trade Agreements Act that suppliers from the 10 new member states of the European Communities (EC) (i.e., the European Union) are eligible to participate in U.S. Government procurement under the terms and conditions of the World Trade Organization Government Procurement Agreement (WTO GPA). This means that in acquisitions subject to the WTO GPA, the contracting officer can accept offers of eligible products from Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, the Slovak Republic, and Slovenia without application of the Buy American Act evaluation factor

BUY AMERICAN ACT-NONAVAILABLE ARTICLES (FAR CASE 2003-007)

This final rule amends FAR 25.104(a) to add certain food and textile items to the list of articles not available from domestic sources in sufficient and reasonably available

commercial quantities of a satisfactory quality. This case is based on extensive market research by the Defense Logistics Agency. Unless the contracting officer learns before the time designated for receipt of bids in sealed bidding or final offers in negotiation that an article on the list is available domestically in sufficient and reasonably available quantities of a satisfactory quality, the Buy American Act does not apply to acquisition of these items as end products, and the contracting officer may treat foreign components of the same class or kind as domestic components.

APPLICATION OF COST PRINCIPLES AND PROCEDURES AND ACCOUNTING FOR UNALLOWABLE COSTS (FAR CASE 2002-006)

This final rule amends the FAR by revising FAR 31.204, Application of Principles and Procedures, to improve clarity and structure. The case was initiated as a result of comments and recommendations received from industry and government representatives during a series of public meetings. This rule is of particular interest to contractors and contracting officers who use cost analysis to price contracts and modifications, and who determine or negotiate reasonable costs in accordance with a clause of a contract, e.g., price revision of fixed-price incentive contracts, terminated contracts, or indirect cost rates.

GAINS AND LOSSES, MAINTENANCE AND REPAIR COSTS, AND MATERIAL COSTS (FAR CASE 2002-008)

This final rule amends the FAR by deleting the cost principle at FAR 31.205-24, Maintenance and Repair Costs, because either Cost Accounting Standards (CAS) or Generally Accepted Accounting Practices (GAAP) adequately address these costs. The rule also revises the cost principles at FAR 31.205-7, Contingencies; FAR 31.205-26, Material Costs; and FAR 31.205-44, Training and Education Costs, by improving clarity and structure, and removing unnecessary and duplicative language.

The case was initiated as a result of comments and recommendations received from industry and government representatives during a series of public meetings. This rule is of particular interest to contractors and contracting officers who use cost analysis to price contracts and modifications, and who determine or negotiate reasonable costs in accordance with a clause of a contract, e.g., price revision of fixed-price incentive contracts, terminated contracts, or indirect cost rates.

STAFFING/COORDINATION OF THE ACQUISITION STRATEGY REPORT (ASR)

program's acquisition strategy is its business and technical management approach designed to achieve program objectives within the resource constraints imposed. Pursuant to Army Regulation (AR) 70-1, the acquisition strategy is based upon an approved requirement (e.g., Capability Development Document, Capability Production Document). It is the framework for planning, directing, contracting for, and managing a program; providing a master schedule for research, development, test, production, fielding, modification, post-production management (i.e., sustainment), and demilitarization; as well as other activities essential for program success. The acquisition strategy is developed through a coordinated effort with agencies that support the program/project/product manager and those that will use and support the system when it is fielded, including organizations that will provide backup and emergency long-term support.

A primary goal of the acquisition strategy is to minimize the time and cost it takes, consistent with common sense and sound business practices, to satisfy identified, validated needs, and to maximize affordability throughout a program's useful life cycle. Essential to the development of the acquisition strategy, is the need for the program manager to perform detailed market research.

Each program manager must develop and document his or her strategy to guide program execution from initiation through the re-procurement of systems, subsystems, components, spares, and services, beyond the initial production contract award into post-production support. The strategy must address the PM's total life-cycle management responsibility, ending in a consideration of the disposal/demilitarization of the system. Coordination must also occur within the Joint acquisition community when other Services and Joint programs may be affected.

The program manager documents his or her strategy in the Acquisition Strategy Report (ASR). Every program, regardless of its Acquisition Category (ACAT), must have an ASR. Prior to sending ASRs for approval by the program's Milestone Decision Authority (MDA), coordination should occur with the combat developer; training developer; facility developer; testers and independent evaluators; logisticians; life cycle software engineers; environmental, safety, and occupational health staff; human system integrators; joint coordination boards (for Joint programs); and other matrix support organizations.

When the program's MDA is the army acquisition executive (AAE), the defense acquisition executive (DAE) (ACAT ID programs), or the assistant secretary of defense (networks and information integration) (ASD(NII)) (ACAT IAD programs), the ASR will undergo Headquarters Department of the Army (HQDA) staffing. The AAE will provide Army approval prior to final DAE/ASD(NII) approval.

Typically conducted by the program's Department of the Army systems coordinator (DASC), HQDA staffing includes, but is not limited to:

- Office of the General Counsel
- Director of acquisition and industrial base policy (SAAL-PA)
- Director of procurement policy and support (SAAL-PP)
- Director of plans, programs and resources (SAAL-RI)
- Director of program assessment and analysis (SAAL-RI)
- Deputy assistant secretary of integrated logistics support (SAAL-ZL)
- Director of technology (SAAL-TT)
- Deputy chief of staff (DCS), G-1 manpower integration (MANPRINT) (DAPE-MR)
- DCS, G-2 (when critical program information has been identified)
- DCS, G-3 (DAMO-RQ)
- DCS, G-8 system support officer
- Chief integration officer (CIO) / DCS, G-6 (SAIS-IOQ)

Other agencies through which the DASC should consider staffing the ASR prior to AAE approval include:

- The program's training and doctrine command systems manager or combat developer
- Army Test and Evaluation Command
- Deputy under secretary of the Army (operations research)
- Assistant secretary of the Army (financial management and comptroller) (SAFM-BU)
- Deputy assistant secretary (cost and economics)

If you have never done this before, be advised: this is not a 24-hour-turnaround effort. You should plan on allowing at least two weeks and preferably 30 days for an office to do a legitimate review of your ASR. It is an important document. Better to get it right the first time!

(Leonard Woody/SAAL-PA/(703) 604-7012/leonard.woody@hqda.army.mil and Debra Dobbins/SAAL-PP/(703) 604-7048/debra.dobbins@hqda.army.mil)

GENERAL ACCOUNTING OFFICE (GAO) REPORTS, STUDIES, TESTIMONY http://www.gao.gov		
Title	Report Number and Release Date	
Defense Space Activities: Continuation of Evolved Expendable Launch Vehicle Program's Progress to Date Subject to Some Uncertainty	GAO-04-778R, June 24, 2004	
Defense Management: Opportunities Exist to Improve Implementation of DoD's Long-Term Corrosion Strategy	GAO-04-640, June 23, 2004	
Defense Logistics: GAO's Observations on Maintenance Aspects of the Navy's Fleet Response Plan	GAO-04-724R, June 18, 2004	
Air Force Depot Maintenance: Improved Pricing and Cost Reduction Practices Needed	GAO-04-498, June 17, 2004	
Coast Guard: Deepwater Program Acquisition Schedule Update Needed	GAO-04-695, June 14, 2004	
Contract Management: Contracting for Iraq Reconstruction and for Global Logistics Support	GAO-04-869T, June 15, 2004	
Military Training: DoD Report on Training Ranges Does Not Fully Address Congressional Reporting Requirements	GAO-04-608, June 4, 2004	
Military Aircraft: DoD Needs to Determine Its Aerial Refueling Aircraft Requirements	GAO-04-349, June 4, 2004	
Highlights of a GAO Forum: Workforce Challenges and Opportunities For 21st Century: Changing Labor Force Dynamics and the Role of Government Polices	GAO-04-845SP, June 1, 2004	
Rebuilding Iraq: Fiscal Year 2003 Contract Award Procedures and Management Challenges	GAO-04-605, June 1, 2004	
Acquisition/Financial Systems Interface Requirements: Checklist for Reviewing Systems under the Federal Financial Management Improvement Act	GAO-04-650G, June 1, 2004	
DoD Operational Ranges: More Reliable Cleanup Cost Estimates and a Proactive Approach to Identifying Contamination Are Needed	GAO-04-601, May 28, 2004	
NASA: Lack of Disciplined Cost-Estimating Processes Hinders Effective Program Management	GAO-04-642, May 28, 2004	
Transportation Security Administration: High-Level Attention Needed to Strengthen Acquisition Function	GAO-04-544, May 28, 2004	
Technology Assessment: Cybersecurity for Critical Infrastructure Protection	GAO-04-321, May 28, 2004	
DoD Operational Ranges: More Reliable Cleanup Cost Estimates and a Proactive Approach to Identifying Contamination Are Needed	GAO-04-601, May 28, 2004	
Contract Management: Impact of Strategy to Mitigate Effects of Contract Bundling on Small Business is Uncertain	GAO-04-454, May 27, 2004	
Defense Acquisitions: Knowledge of Software Suppliers Needed to Manage Risks	GAO-04-678, May 25, 2004	
Information Technology: The Federal Enterprise Architecture and Agencies' Enterprise Architectures Are Still Maturing	GAO-04-798T, May 19, 2004	
Military Base Closures: Assessment of DoD's 2004 Report on the Need for a Base Realignment and Closure Round	GAO-04-760, May 17, 2004	
DoD Business Systems Modernization: Limited Progress in Development of Business Enterprise Architecture and Oversight of Information Technology Investments	GAO-04-731R, May 17, 2004	
Uncertainties Remain Concerning the Airborne Laser's Cost and Military Utility	GAO-04-643R, May 17, 2004	
Chemical and Biological Defense: DoD Needs to Continue to Collect and Provide Information on Tests and on Potentially Exposed Personnel	GAO-04-410, May 14, 2004	
Military Operations: DoD's Fiscal Year 2003 Funding and Reported Obligations in Support of the Global War on Terrorism	GAO-04-668, May 13, 2004	
Joint Strike Fighter Acquisition: Observations on the Supplier Base	GAO-04-554, May 3, 2004	

DIRECTOR, DEFENSE PROCUREMENT AND ACQUISITION POLICY HOLDS PROCUREMENT CONFERENCE

Evelyn Layton

he biennial Department of Defense Procurement Conference was held in May 2004 in Orlando, Fla. Sponsored by Deidre Lee, director, defense procurement and acquisition policy, this year's event was hosted by Deputy Assistant Secretary of the Air Force for Contracting Charlie Williams Jr., who welcomed participants.

The presentation and break-out sessions clearly reinforced Lee's leadership challenges in transforming procurement. Using the 2004 conference as both a forum and a catalyst for transformation, she identified opportunities for acquisition improvements; communicated new, revised, and future policies and procedures with the people who must implement them; and in turn gave them an opportunity to communicate problems they have identified in policies and participate in developing policy changes.

Transformation in Today's Procurement Environment

The Transformation of Defense Procurement—People, Policy, Processes was the conference theme, wherein conferees examined the meaning of transformation in the context of today's procurement environment. Lee began by stating that DoD is currently changing from a transaction-oriented process to a strategic-oriented enterprise. The discretion afforded contracting professionals by the 1994 Federal Acquisition Streamlining Act to streamline transactions, she told the participants, is no longer enough. Considering the steep number of contracting actions last year (16.5 million), Lee advocates that contracting professionals also be business advisors creating broader strategies to manage an increasing workload.

Five hundred and sixty-seven people attended the conference. While most were the leaders of military and defense agency buying activities for whom the conference was targeted, a number of industry members also attended. Lee specifically recognized them as "valued partners." To support the transformation in procurement, members of an industry panel, *Transformation in Industry*, discussed how they must also transform by streamlining their strategic sourcing processes.

"Seventy percent of government spending goes through DoD," Lee stated. And Congress, she added, is concerned with the way DoD manages its acquisitions. Quoting \$250 billion as DoD's total spending last year, she stressed



Emphasizing her point, at the May 2004 Defense Procurement Conference, that contracting professionals must also be business advisors, Deidre Lee, director, defense procurement and acquisition policy, summarizes key strategies to manage an increasing workload: multiple award contracts, competition, services contracting, small business opportunities, e-business, contingency planning, and property management.

Photo by Army Staff Sgt. Kevin Moses

that commensurate with DoD's large percentage of the budget comes an increased responsibility for leader-ship—a comment that served to reinforce her point that "what DoD does, matters."

A panel discussion, *Acquisition of Services*, highlighted some of the issues in managing services acquisitions. Panel members agreed that requirements generators need to know the Federal Acquisition Regulation (FAR) restrictions on services early in the planning process—specifically in the area of performance-based contracting. Since this approach represents a culture change for

government and industry alike, the members proposed that acquisition personnel coordinate early and communicate throughout the process.

Issues relating to identifying, tracking, and accounting for billions of dollars of assets and reporting the net costs of operations are also problems that have drawn congressional attention. Two initiatives, Unique Identification (UID) of Items, and Military Equipment Valuation (MEV), were presented at the conference as department solutions.

- UID will facilitate item tracking to provide accurate data for financial accountability and asset management purposes. As of Jan. 1, 2004, UID is a requirement for all solicitations < http://www.acq.osd.mil/uid > .
- MEV will ensure military equipment is properly valued, capitalized, and depreciated. Contracting officers must identify which contracts contain capital assets and write separate line items for each asset type http://www.acq.osd.mil/me>.

Lee also recalled the recent press reports concerning improper actions by acquisition personnel. "All levels of personnel in the acquisition community," she reminded those assembled, "need to stand up and do the right thing." The Department's Office of General Counsel fol-

With the department supporting 123 different procurement systems, the Acquisition Domain strategy is the linchpin of acquisition transformation by integrating people, processes, and technologies to modernize acquisition business processes and systems.

How to operate in an environment with too much work and too few people was identified by attendees as their biggest problem in supporting the warfighter. An already declining number of workforce members are burdened with an increased number of procurement actions. Because of the Iraq war, approaches are needed within the department, and the situation



has worsened because a significant number of military and civilian staff are being reassigned to contingency contracting operations. This tough problem was addressed throughout the conference through plenary sessions and workshops that focused on how DoD is fully leveraging its people, policies, and procedures.

lowed her remarks with a presentation entitled *Ethics/Business Conduct*, regarding post-government service employment restrictions.

People

Under Secretary of Defense for Personnel and Readiness David S.C. Chu spoke about the National Security Personnel System (NSPS), which will establish new rules for how civilians are hired, assigned, compensated, promoted, and disciplined. He solidly supports the position that people in the field must have the right pay and the right skills at the right place.

Defense Acquisition University President Frank Anderson related in his *DoD Workforce Transformation* briefing how DAU has transformed to meet the department's need for an agile, knowledgeable acquisition workforce. The corporate university, he said, provides acquisition support 24 hours a day, 7 days a week to provide the right skills at the right place. Anderson reminded the participants that three primary learning services—knowledge sharing, continuous learning, and performance support—can be accessed through DAU's Web site http://www.dau.mil .

Anderson, who is also responsible for managing the career development of the acquisition workforce, spoke about the recent changes made to the Defense Acquisition Workforce Improvement Act (DAWIA) by the Defense Authorization Act for FY 2004. Flexibility, he emphasized, is the focus of the revised DAWIA with centralized policy and decentralized execution.

Consolidating information regarding acquisition education and training, Anderson noted, is a top priority. Instead of several directives that currently exist, a single directive supplemented by a manual will contain the policy on AT&L career development. Other significant features include uniform criteria for Acquisition Corps membership, additional management flexibility for senior leaders, and solid metrics to measure the performance of the career development program.

Contracting Community CPA Volunteers

Recognizing the volunteers from the contracting community supporting the Coalition Provisional Authority (CPA) in Baghdad, Tina Ballard, deputy assistant secretary of the Army (policy and procurement) described the working conditions of one volunteer who left his wife and family for six months and why he did it.

Dennis Longo, the volunteer of whom she spoke, says he is more than glad to serve—he is "honored." In his article "Baghdad: A Contracting Officer's Perspective," published in the November-December 2003 issue of Army AL&T < http://asc.army.mil/docs/pubs/alt/2003/6_NovDec/dept/65_Dept_Contracting_Community_200306.pdf > , Longo describes the hardships—sweltering heat, thick dust, malaria pills, and supervisors who, "wanted it yesterday, you work on it today, it gets here tomorrow." This, he explains, is known among the troops as the "three-day workweek."

Longo's article also illustrates Lee's view that the role of contracting personnel is now elevated to that of a business advisor. "The resources we're used to in the U.S. don't work," he observes, "so you rely on your experience and exercise sound judgment."

Although the Army has authority and responsibility for the provision of acquisition support to the CPA, contracting support to Iraq is a joint effort of DoD. Currently DoD is pursing a joint doctrine and policy. For the \$5 billion in construction awards, there were more than 130 contracting professionals, career civil servants, and military involved—and more than \$2 billon was awarded by staff working in Baghdad. These contracting offices are also handling actions for approximately \$6 billion in non-construction items. (See questions and answers that emerged from the *Contractors on the Battlefield* panel at http://www.acq.osd.mil/dpap/Docs/temp-Questions % 20from % 20DoD % 20Proc % 20Conf.doc > .)

Processes

Lee identified DoD-wide strategic sourcing and commodity councils as processes designed so more could be done with less by migrating large contracts to regional centers and consolidating like services. During the *Transformation at Work* panel, members from each Service and the Defense Logistics Agency highlighted strategic acquisition approaches within their organizations (Figure 1).

- Air Force has realized a \$6 million cost avoidance from the commodity strategy it developed for buying PCs.
- Army Contracting Agency has achieved \$37 million in cost avoidance for buying information technology equipment, furniture refurbishment, and security guard service.
- Naval Supply Systems Command is looking at a better alignment of its organization to deliver combat capability through logistics to the Navy efficiently and effectively.
- DLA is creating an enterprise incorporating end-toend management, financials, and procurement for a broad range of functions and business lines through its Business Systems Modernization initiative.

FIGURE 1. Strategic Acquisition Approaches within the Services and Defense Logistics Agency

An increasing number of multiple-award contracts referred to as master contract suites are already being awarded within individual components, but the strategy for the future is to have more strategic sourcing opportunities at the DoD level.

On the same theme, Mark Krzysko, Deputy Director, Defense Procurement and Acquisition Policy, e-Business, gave a briefing on Lee's Acquisition Domain initiative. The Acquisition Domain initiative is a strategic direction transforming the acquisition enterprise into what is now labeled a *net-centric* DoD. With the department supporting 123 different procurement systems, the strategy is the linchpin of acquisition transformation by integrating people, processes, and technologies to modernize acquisition business processes and systems.

Outlining the difficulties inherent in such a mass integration effort, Krzysko said, "We need to band together as a community and decide which systems and processes we need and how to move forward...Reducing redundant systems helps us meet our ultimate responsibility to support the warfighter."

Past	Future	
Transaction-oriented	Strategic, enterprise approach	
Isolated workers	Knowledge-based, collaborative workers	
Local information	Shared business intelligence	
"Silos" of data	Integration with Logistics, Finance, and other communities	
No common architecture	Enterprise architecture	
Stand-alone applications that lack interoperability	Net-centric, interoperable applications	
Redundant systems; capability gaps	Rationalized systems	
Tactical utility to individ- ual program	Strategic value to the Department	
Long cycle times and transaction costs	Decreased cycle times and transaction costs	
FIGURE 2. Acquisition Domain—Past and Future		

Figure 2 above depicts how the Acquisition Domain activity is transforming the way the department plans to do business in the future.

Already important procurement solutions of the Acquisition Domain include:

- Standard Procurement System (SPS), which is a joint, automated contracting system that standardizes procurement processes across DoD
- Wide Area Workflow (WAWF), which enables electronic processing of invoices and receiving reports to increase accurate document processing for financial, logistics, and procurement communities
- Sourcing Analysis of Alternatives (AOA), which identifies sourcing capabilities
- Acquisition Spend Analysis Pilot, which targets the
 capability to retrieve data from disparate data sources
 and convert it to a DoD-wide data dictionary from
 which reports can be produced; for example, the
 process can facilitate what type of services the department is acquiring, from whom they are being acquired, and who is acquiring them.

Besides leveraging cross-functional and cross-departmental opportunities, these commercial best practices will better use the capabilities of small businesses and increase competition—all areas identified by Lee in her opening remarks as department goals. She noted that

she fully understands the complications the multitude of small business set-asides have caused in processing procurement actions and that the system has become complicated and layered.

Policies

Under Lee's direction, a major transformation initiative is under way to identify improvements to procurement policies, procedures, and processes in the Defense Federal Acquisition Regulation Supplement (DFARS). In February 2003 Lee assigned a task force to consider recommendations and develop legislative proposals for consideration by Congress for future changes to the DFARS. Her direction for improvement and simplification of the DFARS was presented in the briefing *Procedures, Guidance, Information, and Knowledge Management*. A significant objective of the transformation effort, she reported, is to reduce content of the DFARS by 40 percent.

The transformed DFARS will contain requirements of law, DoD-wide policies, delegations of FAR authorities, deviations from FAR requirements, and policies/procedures that have a significant effect on the public. The new DFARS will have a companion resource, *Procedures, Guidance, and Information (PGI)*, which will contain mandatory and non-mandatory internal DoD procedures, non-mandatory guidance, and supplemental information. The first increment of the transformation is to finalize rules to move the current PGI coverage out of the DFARS with pop-up links to related PGI language. Future increments are proposed to create a knowledge management system so users can navigate through training modules, background information, and reference guides < http://www.acq.osd.mil/dpap/dfars/transf.htm > .

A panel discussion *Legislation and Regulation* walked conferees through the process of how a bill becomes a law and how a law becomes part of the DFARS. A summary of the 17 DoD statutes that are part of FY 2004 legislation addressed the five that have been published to date and the four that will be published soon. Figure 3 lists these nine published and soon-to-be published statutes http://www.acq.osd.mil/dpap/dars/new.htm .

Just Do Something

The conference closed with a senior procurement executive panel and a wrap-up by Lee. The panel, in discussing what actions the participants should take when they return to the job, suggested: know the mission and focus on mission accomplishment, not bureaucratic requirements; mentor subordinates, freely sharing what you've learned; and take a leadership role in transformation.

Published to Date	Soon
Special Emergency Procurement Authority	Permanent Emergency Procurement Authority
Five-year limit on Task and Delivery Orders	T&M or LH Commercial Services (exception)
Berry Amendment Exceptions for Contingen- cies	Quality Control in Aviation Critical Safety Items
Service Disabled Veteran- Owned Small Business	Consolidation of Contract Requirements
Federal Prison Industries— Market Research	

FIGURE 3. Published and Soon-to-Be Published Fiscal Year 2004 Legislation

Their final advice was, "Just do something that will change the way we think and focus on service support."

Lee concluded by emphasizing her support of the panel's suggestions and posing a question for deliberation by all participants. "We all need to pay attention—are we doing things right and can we do better?"

Editor's note: Layton is currently the Defense Acquisition University's director for accreditation and corporate history. She is a Level-III certified member of DoD's Acquisition Corps in the contracting career field. Presentations from the conference are posted online at http://www.acq.osd.mil/dpap>.

DAU ALUMNI ASSOCIATION SYMPO-SIUM: STRATEGIES FOR JOINTNESS AND INTEROPERABILITY

Christina Cavoli

he Defense Acquisition Alumni Association (DAUAA) held its 21st Annual Acquisition Symposium at the Defense Acquisition University (DAU), Fort Belvoir, Va., in June. Titled *Jointness and Interoperability: Strategies that Really Work*, the symposium combined speakers, panels, and workshops to provide participants with a meaningful understanding of the concepts and possibilities of joint program management between government agencies, the Department of Defense, and industry. The keynote speaker was John Young, assistant secretary of the Navy, research, development and acquisition (RD&A), who is also the president's nominee to the position of principal deputy under secretary of defense (acquisition, technology and logistics).

Building the Superhighway to the Future

In his keynote address, Young reminded the audience that organizations must continually reinvent themselves to react to emerging challenges. He likened the process to "laying a path one brick at a time," a process that will result in a superhighway to the future, an organization that can respond in new and expanded ways to a constantly shifting environment. This building-block approach differs from traditional beginning-to-end solutions, which, while often effective in the short term, frequently became dated or obsolete and are usually proprietary.

Collaboration is mandatory to achieve this high-performing organization; the various parts must operate as joint stakeholders. Young noted that the current discrete abilities within the Services need to be meshed together, and industry must be incorporated into all stages of the process. Strategies are also needed to ensure effective relationships with allies; coalition partners must be involved in creating a truly interoperable system. System engineering approaches and open architectural systems are necessary to align all players and to create programs that are "born joint." Such commonality requires some compromise from all participants, but can produce strategies that are resourceful and offer a price advantage—a bottom line that interests everyone.

Young noted that artificial walls still exist that can interfere with developing joint capabilities: programs are still executed as stand-alone efforts; schedules remain asynchronous. "[It will be necessary] to let go of some authority, some ownership, in order to aggressively pursue interoperability," Young said. For the acquisition workforce, translating the new joint requirements process into the working details in a contract is a great challenge. Young urged the workforce to be proactive. "A legacy is being created as we go-we need to create a measured path into the desired future," he said.

Interoperability Executive Panel

An annual symposium highlight, the Senior Acquisition Executive Panel, presented a *Service Perspective on Interoperability* featuring Young and Claude M. Bolton Jr., assistant secretary of the Army (acquisition, logistics and technology).

Bolton acknowledged that the existing culture often impedes effective joint program management and system interoperability among components. A desire to maintain control of resources and to control all facets of a program can inhibit jointness, yet depending on others to perform tasks will ultimately create a positive synergy. In a joint atmosphere, participants must re-adjust to getting most, not all, of what is wanted. The panel agreed discipline is necessary to create commonality. Contracts must be written to incorporate jointness from the very



Senior Acquisition Executive panel members John Young, assistant secretary of the Navy, research, development and acquisition (left) and Claude M. Bolton Jr., assistant secretary of the Army (acquisition, logistics and technology), discuss interoperability from a Service perspective.

Photo by Army Staff Sgt. Kevin Moses

beginning. Requisitions must be questioned: Is this requirement joint? Is the payback reasonable? Does it allow for open architecture? Necessary compromises on all sides may sometimes results in 80 percent solutions, added Young "But "80 percent joint is better than 100 percent disparate," he said.

Etherton Receives Acker Award

Frank Anderson, DAU president, presented the 2004 David D. Acker "Skill in Communication" Award to Jonathan L. Etherton, vice president for legislative affairs, Aerospace Industries Association (AIA). Named for former Defense Systems Management College professor David Acker, the award is presented annually to an individual who has promoted and communicated acquisition management excellence to the acquisition workforce. Etherton was recognized for his major role in the development and enactment of critical legislation supporting defense acquisition for nearly three decades, his expertise of key public policy and budget issues before congressional subcommittees, and his dedication to sharing his knowledge with the students and faculty at DAU.

Cavoli is a freelance writer who provides contract support to the Defense Acquisition University.

ASA(AL&T) MILITARY DEPUTY TO HOST "MEET THE MILDEP" AT PICATINNY

rmy Lt. Gen. Joseph L. Yakovac Jr., military deputy (MILDEP) to the assistant secretary of the Army for acquisition, logistics and technology (AL&T), will speak to the AL&T workforce and other interested parties at Picatinny, N.J., Sept. 15, 2004. This presents an exciting opportunity for the mid-Atlantic AL&T workforce to interact with the MILDEP.

It also provides a unique opportunity for the MILDEP to share his goals and objectives for the future of Army acquisition with those who are ultimately working towards making these goals a reality. He will also address current hot topics impacting the acquisition community at large in a personalized forum that will allow attendees an opportunity to engage the MILDEP in meaningful dialog.

2004 EISENHOWER NATIONAL SECURITY CONFERENCE (SEPT. 14-15, 2004)

he 2004 Eisenhower National Security Conference will be held in the Ronald Reagan Building and International Trade Center, Washington, D.C. The theme of this year's event is *National Security for the 21st Century—Balancing our Essential Requirements*. We

live in an increasingly complex and globalized world, a world where national and international responsibilities and expectations are evolving. In such a world, how do we determine, and ultimately balance, our requirements as a nation? What requirements, if any, are essential?

The metrics by which policymakers balance requirements will always differ. Some view the world through a lens of morality, others through one of security. Some advocate unilateral actions, others prefer a multi-national approach. Who is correct? Should there be a balance between the various approaches? What course should our policymakers chart when essential requirements stand in opposition to each other? The 2004 conference endeavors to contribute substantively to this important and ongoing national security dialogue.

For more information or to register, send an e-mail to info@eisenhowerseries.com or visit the conference Web site at http://www.eisenhowerseries.com>.

MEASURING AND GUIDING TRAINING TRANSFORMATION MINI-SYMPOSIUM/ WORKSHOP (SEPT. 28-30, 2004)

t the 71st Military Operations Research (MORS) Symposium in June 2003, Dr. David Chu delivered a challenge to the MORS community to conduct assessments and make recommendations to improve Training Transformation (T2). In response to this challenge, MORS has organized a Mini-Symposium/Workshop on *Measuring and Guiding Training Transformation*, which will be held Sept. 28-30, 2004, at the SAIC McLean Conference Center Tower II, Science Applications International Corporation (SAIC) in McLean, Va. Registration will begin at 0700 on Tuesday, the 28th. You are invited to apply to participate in this special meeting. Attendance will be limited by the space available.

Registration forms are available at http://www.mors.org/training/transformation.htm .

7TH ANNUAL SYSTEMS ENGINEERING CONFERENCE (OCT. 25-28, 2004)

major conference focusing on mission areas and capabilities of defense systems, including interoperability, supportability, and reducing total ownership costs, will be convened in Dallas, Texas, Oct. 25-28, 2004, under the auspices of the National Defense Industrial Association, Systems Engineering Division. The conference is held in conjunction with the director, systems engineering, Office of the Under Secretary of

Defense for Acquisition, Technology and Logistics (AT&L), Defense Systems, with technical co-sponsorship by the International Council on Systems Engineering (INCOSE).

For more information go to http://register.ndia.org/ interview/register.ndia?#September2004 > .

DOD E-BUSINESS/SPS JOINT USERS' CONFERENCE 2004 (NOV. 15-19, 2004)

he Department of Defense (DoD) E-Business/Standard Procurement System (SPS) Joint Users' Conference, to be held in Houston Nov. 15-19, 2004, is the premiere event for DoD procurement professionals to hear about the Department's acquisition domain, see Version 4.2 Increment 3 demonstrated, and share lessons learned and valuable tips with other SPS users worldwide from across the military services and defense agencies. More than 1,000 SPS users and managers are expected to attend the conference. Honored speakers include Kay Coles James, director, Office of Personnel Management, and Deidre Lee, director, Defense Procurement and Acquisition Policy. Additionally, military services and defense agencies each have several days devoted to specific breakout sessions in which they tackle topics of interest unique to their Service/agency. Don't miss out: space is limited, so reserve your ticket today at < http://www.spscoe.sps.eis.army.mil > .

INTERSERVICE/INDUSTRY TRAINING, SIMULATION AND EDUCATION CONFER-ENCE (DEC. 6-9, 2004)

he Interservice/Industry Training, Simulation and Education Conference (I/ITSEC) will be held Dec. 6-9, 2004, in Orlando, Fla. I/ITSEC promotes cooperation among the armed services, industry, academia, and various government agencies in pursuit of improved training and education programs, identification of common training issues, and development of multiservice programs. Initiated in 1966 as the Naval Training Device Center/Industry Conference, the conference has evolved and expanded through increased participation by the Army, Air Force, Marine Corps, Coast Guard, and industry.

For more information or to register, go to the I/ITSEC Web site at < http://www.iitsec.org > .



THE UNDER SECRETARY OF DEFENSE 3010 DEFENSE PENTAGON WASHINGTON, D.C. 20301-3010

MAY 28 2004



MEMORANDUM FOR DISTRIBUTION

SUBJECT: Under Secretary of Defense (Acquisition, Technology and Logistics) Award for Learning and Development Excellence

To promote the objectives of the Under Secretary of Defense (Acquisition, Technology and Logistics (USD(AT&L)) Goal 7—Motivated, Agile Workforce, I have established a USD(AT&L) Award for Learning and Development Excellence. This program recognizes Department of Defense AT&L field organizations that have made exemplary contributions to the career-long learning and development of their workforce.

Specific guidelines on eligibility, nomination, and selection are attached. [Editor's note: The current nomination period closed July 30, 2004. Future year nominations will be accepted by the Defense Acquisition University at the following address:]

Defense Acquisition University ATTN: Planning, Policy and Leadership Support 9820 Belvoir Road Fort Belvoir, Virginia 22060-5522

The ceremony for the presentation of the Learning and Development Award will be held in the fall of 2004. I encourage your participation in this inaugural award program.

My point of contact is Dr. Russell A. Vacante at (703) 805-4864 or via e-mail at russ.vacante @dau.mil.

Michael W. Wynne Acting

Attachments As stated

Editor's note: To view distribution of this memorandum or download a copy of the attachments, visit the Defense Acquisition University Web site at http://www.dau.mil/ATL%20Learning%20and%20Development/default.asp.



ARMY NEWS SERVICE (JUNE 2, 2004) ARMY NAMES GREATEST INVENTIONS OF YEAR

ASHINGTON—Ten teams were recognized June 23 by the U.S. Army Research, Development and Engineering Command for the "Greatest Army Inventions" of the past year.

The winning inventions include a zinc-air battery, life-saving medical equipment, the first antipersonnel round for the Abrams tank, and camera equipment to inspect caves.

"The inventions submitted demonstrate the vast experience within the Army laboratory community as a sincere commitment of these laboratories to improving the readiness of our Army," said Lt. Gen. Richard A. Cody, the Army's deputy chief of staff, G-3, and the final selection authority for the program.

BA-8180/U ZINC-AIR BATTERY

The BA-8180/U Zinc-Air Battery was developed by Communications-Electronics Research, Development and Engineering Center, Integrated Battle Command Directorate, Fort Monmouth, N.J. The battery has an extended life cycle that enables fewer batteries to be carried by soldiers than other rechargeable or lithium batteries.

The first antipersonnel round for the Abrams Main Battle Tank was designed by the Armaments Engineering and Technology Center, Picatinny Arsenal, N.J. The Ctg 120mm xm1208 canister consists of a two-piece projectile canister aluminum body with four axial slots to

A medical care professional uses the Battlefield Medical Information System-Telemedicine while treating a patient. The BMIS-T is one of the 2003 Army Greatest Inventions.

U.S. Army photo



facilitate the separation of the sidewall. This design improves payload discard reliability and uniformity, according to experts.

ANTI-TANK FOR CONFINED SPACE—AT4 CS

The anti-tank for confined space, also called the AT4 CS is also the creation of the Armaments Engineering and Technology Center in Picatinny Arsenal, N.J. The AT4 CS is the Department of Defense's first large-caliber antitank capability that can be fired from an enclosed area. It is a light, recoilless, shoulder-fired, preloaded weapon used for close-range combat. Designed for a single use, once the weapon has been fired the launcher is thrown away.

There is a counter mass container on one end of the AT4 CS that reduces overblast, debris, and noise. This feature allows the weapon to be fired from inside a room, in a thick jungle, or in front of an obstacle.

ANTI-PERSONNEL OBSTACLE BREACHING SYSTEM (APOBS)

An anti-personnel obstacle breaching system (APOBS) is another invention created by the Armaments Engineering and Technology Center. The APOBS is used to clear areas and create footpaths for troops moving in an area with mines or wire obstacles. It replaces the Bangalore Torpedo, which was heavier, took longer to set up, and four times the number of people to carry, officials said.

The APOBS can be carried by two people, and takes 30 to 120 seconds to be set up. Once in place, it fires a rocket

from a 25-meter standoff position, sending a line charge with fragmentation grenades over the minefields or wire obstacles. The grenades clear the mines and sever the wires.

AGENTASE NERVE AGENT SENSOR

Agentase Nerve Agent Sensor is an invention designed by the U.S. Army Research Laboratory from the U.S. Army Research Office in Durham, N.C. The sensor is a hand-held device that detects nerve agents when pressed against a surface. Reactive components have been integrated inside two polymer layers that remove requirements by conventional technologies for additional substrates or extended incubation times. If a nerve agent chemical weapon is present, a color-developing polymer layer contains an environmentally sensitive indicator that changes from yellow to red/orange within two minutes.

PORTABLE OMNI-DIRECTIONAL WELL CAMERA SYSTEM

The Portable Omni-Directional Well Camera System was developed at Fort Belvoir, Va., by the Communications-Electronics Research, Development and Engineering Center Night Vision and Electronic Sensors Directorate. The system is designed for inspecting wells, underground caves, or vertical passages that are unfit or unsafe for human inspection. It can be used in light or dark conditions and to a depth of 300 feet. Video from a hemispherical CCD sensor payload is displayed on a four-inch monitor at the surface of an area being explored. The system is designed to be waterproof to a depth of 90 feet.

GOLDEN HOUR CONTAINER

The Golden Hour Container was created by the Walter Reed Army Institute of Research in Silver Spring, Md. This container can transport red blood cell units without the use of batteries, ice, or electricity. It was designed to transport the blood cell units within military facilities and to forward surgical teams where delayed evacuation of wounded soldiers can occur. The container is reusable and maintains the contents at the appropriate temperatures for more than 78 hours. While designed specifically for transporting red blood cell units, inventors believe its usefulness will extend to other items such as vaccines and reagents. The container has a carrying strap and comes in Army desert, woodland, and Marine camouflage.

VIRGIL CHEST TRAUMA TRAINING SYSTEM

VIRGIL Chest Trauma Training System is the invention of the Simulation Group, Telemedicine and Advanced Technology Research Center at Fort Detrick, Md. The training system combines the use of a mannequin and a computer-based graphic interface. It is used during training exercises and tracks the internal position of chest darts and chest tubes as well as provides feedback to the user.

SQUAD AUTOMATIC WEAPON (SAW) PINTLE MOUNT ASSEMBLY

A mount assembly, designed by the Tank Automotive Research, Development and Engineering Center, National Automotive Center in Warren, Mich., helps provide more security to crews in Humvees. The Squad Automatic Weapon (SAW) Pintle Mount Assembly provides soldiers the ability to defend themselves from both sides of the vehicle. It also allows the SAW to be elevated to a 45-degree angle to defend soldiers from an enemy who may be on overpasses or similar overhead objects. The mount is attached mid-way between the front and rear

doors on the HMMWV. This provides crew members in either the front or rear seats to use the weapon by swiveling the weapon in the direction needed.

BATTLEFIELD MEDICAL INFORMATION SYSTEM-TELEMEDICINE (BMIS-T)

The Battlefield Medical Information System–Telemedicine (BMIS-T) was designed by the Telemedicine and Advanced Technology Research Center, Fort Detrick, Md. BMIS-T is a similar to a handheld computer with special programming developed to assist deployed medical personnel with diagnosis and treatment. It can be used to record patient clinical encounters and transmit those records to a central repository, officials said. The system holds servicemembers' medical records including immunizations, dental and vision records, as well as known drug allergies. BMIS-T is programmed with healthcare reference manuals and can provide medical personnel with suggested diagnosis and treatment plans.

Nominations for the program were submitted from across the Army laboratory community and were evaluated by soldier teams from the U.S. Army Training and Doctrine Command and active U.S. Army Divisions, according to Gen. Paul J. Kern, commander of the U.S. Army Materiel Command.

Evaluators judged the entries based on their impact on Army capabilities, potential benefit outside the Army, and their inventiveness.

Each of the winning teams received a glass trophy and a Department of the Army certificate during the June 23 ceremony at the Hilton in McLean, Va.

Editor's note: Information provided by Larry McCaskill of the U.S. Army Research, Development and Engineering Command and summarized by ARNEWS correspondent Karla Gonzalez.

AIR FORCE PRINT NEWS (JUNE 3, 2004) AIR FORCE ANNOUNCES BUSINESS AWARDS

Staff Sqt. Melanie Streeter, USAF

ASHINGTON—Winners of the 2003 Secretary of the Air Force Small and Disadvantaged Business Awards were recognized by Peter B. Teets, undersecretary of the Air Force, in a ceremony June 1.

"As President [George W.] Bush said recently, small businesses and the entrepreneurial spirit are 'really what America has been, is and should be all about,'" Teets

said. "From the perspective of my 40 years of industry experience, I couldn't agree more. I'm particularly pleased with the efforts our award winners have made in support of the Air Force Small Business program," he said.

This year's winners are:

SECRETARY OF THE AIR FORCE SMALL BUSINESS PROGRAM EXCELLENCE AWARD

Warner Robins Air Logistics Center at Robins Air Force Base. Ga.

SECRETARY OF THE AIR FORCE SPECIAL ACHIEVEMENT AWARD (INDIVIDUAL)

Ray Blevins of the 314th Contracting Squadron at Little Rock AFB, Ark.

SECRETARY OF THE AIR FORCE SPECIAL ACHIEVEMENT AWARD (ACTIVITY)

82nd Training Wing at Sheppard AFB, Texas.

OUTSTANDING CONTRIBUTION TO THE SMALL BUSINESS PROGRAM BY A CONTRACTING TEAM

Air Force Research Laboratory at Rome, N.Y.

OUTSTANDING CONTRIBUTION TO THE SMALL BUSINESS PROGRAM BY A CONTRACTING INDIVIDUAL

Carol Singleton from Brooks City-Base, Texas.

"Not only do small businesses support many different facets of the Air Force mission, they involve a major segment of the nation's population in national security," Teets said. "And they often lead to increased quality and lower costs.

"Small business is smart business for the Air Force," he said.

ARMY NEWS SERVICE (JUNE 21, 2004) PROGRAM MANAGER—STRYKER GETS ENVIRONMENTAL AWARD

Joe Burlas

ASHINGTON—Program Manager–Stryker just got an award normally given to Army installations. Lt. Gen. Joseph Yakovac, military deputy to the assistant secretary of the Army for acquisition, logistics and technology, presented the Secretary of the Army Environmental Excellence Award in a Pentagon ceremony June 17.

"We are not only responsible for being good stewards of taxpayers' money, but good stewards of the environment," Yakovac said. "It's not glamorous, but we need to save the world for future generations' use."

The citation for the award credited Project Manager–Stryker with establishing an interagency environmental management team that significantly reduced the hazards materials used in building the Army's newest combat family of vehicles and other environment-friendly features designed into the vehicles. Examples include a design that catches spent shell casings and another that traps fluids that are normally released to the environment. Additionally, the team created processes that eliminate many uses of chromium and cadmium in the production, fielding, and repair in the first halon-free crew explosion protection system.

Less use of hazardous material in the Stryker means less risk to the warfighters who use the vehicle, according to the citation. It also means less of a hazardous waste burn to the installations where the Stryker is operated and maintained, it said.

Col. Dave Ogg, Stryker project manager, accepted the award from Yakovac. "While I may be getting the credit, winning this award was truly a team effort," Ogg said.

AT&L WORKFORCE—KEY LEADERSHIP CHANGES

DEPARTMENT OF DEFENSE NEWS RELEASE (MAY 11, 2004)

FLAG OFFICER ANNOUNCEMENTS

ecretary of Defense Donald H. Rumsfeld announced today that the president has made the following nominations:

Navy Rear Adm. (lower half) Jeffrey A. Brooks has been nominated for appointment to the rank of rear admiral (lower half). Brooks is currently serving as fleet maintenance officer, U.S. Atlantic Fleet, Norfolk, Va.

Navy Rear Adm. (lower half) Charles T. Bush has been nominated for appointment to the rank of rear admiral. Bush is currently serving as program executive officer for Integrated Warfare Systems, Washington, D.C.

Navy Rear Adm. (lower half) Steven L. Enewold has been nominated for appointment to the rank of rear admiral. Enewold is currently serving as deputy director for Joint Strike Fighter, Office of the Secretary of Defense, Washington, D.C.

Navy Rear Adm. (lower half) Timothy L. Heely has been nominated for appointment to the rank of rear admiral. Heely is currently serving as program executive officer for Strike Weapons and Unmanned Aviation, Patuxent River, Md.

Navy Rear Adm. (lower half) Joseph Maguire has been nominated for appointment to the rank of rear admiral. Maguire is currently serving as commander, Naval Special Warfare Command, San Diego, Calif.

DEPARTMENT OF DEFENSE NEWS RELEASE (MAY 18, 2004)

GENERAL OFFICER ANNOUNCEMENT

ecretary of Defense Donald H. Rumsfeld announced today that the president has nominated Army Lt. Gen. Benjamin S. Griffin for appointment to the grade of general and assignment as commanding general, U.S. Army Materiel Command, Fort Belvoir, Va. Griffin is serving as the deputy chief of staff, G-8, U.S. Army, Washington, D.C.

DEPARTMENT OF DEFENSE NEWS RELEASE (MAY 18, 2004) GENERAL OFFICER ASSIGNMENT

he Army chief of staff announces the assignment of the following general officer:

Brig. Gen. Charles A. Cartwright, deputy commanding general for Systems of Systems Integration, U.S. Army

Research, Development and Engineering Command, Fort Belvoir, Va., to program manager, Unit of Action, St. Louis, Mo.

DEPARTMENT OF DEFENSE NEWS RELEASE (MAY 24, 2004) FLAG OFFICER ASSIGNMENT

hief of Naval Operations Adm. Vern Clark announced the following flag officer assignment:
Navy Rear Adm. (selectee) Steven W. Maas is

being assigned as director for Logistics and Engineering, J4, United States Northern Command, Peterson AFB, Colo. Maas is currently serving as director, Logistics/Fleet Supply Officer, N41, United States Atlantic Fleet, Norfolk, Va.

DEPARTMENT OF DEFENSE NEWS RELEASE (JUNE 2, 2004) FLAG OFFICER ASSIGNMENT

hief of Naval Operations Adm. Vern Clark announced the following flag officer assignment:

Navy Rear Adm. (lower half) Mark D. Harnitchek
is being assigned as vice director for Logistics, 14. Joint

is being assigned as vice director for Logistics, J4, Joint Staff, Washington, D.C. Harnitchek is currently assigned as commander, Navy Inventory Control Point Philadelphia/Mechanichsburg, Pa.

DEPARTMENT OF DEFENSE NEWS RELEASE (JUNE 2, 2004) GENERAL/FLAG OFFICER ANNOUNCE-

ecretary of Defense Donald H. Rumsfeld announced today that the president has made the following nominations:

General

MENTS

Marine Corps Lt. Gen. James E. Cartwright for appointment to the rank of general and assignment as the commander, United States Strategic Command. Cartwright is currently serving as the director, Force Structure, Resources and Assessment, Joint Staff, J-8, Washington, D.C.

Admiral

Navy Vice Adm. John B. Nathman for appointment to the rank of admiral and assignment as vice chief of Naval Operations, Pentagon, Washington, D.C. Nathman is currently serving as deputy chief of Naval Operations for Warfare Requirements and Programs, N6/N7, Office of the Chief of Naval Operations, Pentagon, Washington, D.C.

AT&L WORKFORCE—KEY LEADERSHIP CHANGES

Vice Admiral/Lieutenant General

Navy Rear Adm. Charles L. Munns for appointment to the rank of vice admiral and assignment as commander Submarine Force, United States Atlantic Fleet and commander, Submarine Allied Command, Atlantic, Norfolk, Va. Munns is currently serving as director, Navy and Marine Corps Intranet, Office of the Assistant Secretary of the Navy (Research, Development and Acquisition), Arlington, Va.

Navy Rear Adm. Ronald A. Route for appointment to the rank of vice admiral and assignment as inspector general, Department of the Navy, Washington, D.C. Route is currently serving as president, Naval War College, Newport, R.I.

DEPARTMENT OF DEFENSE NEWS RELEASE (JUNE 16, 2004) GENERAL OFFICER ASSIGNMENT

ecretary of Defense Donald R. Rumsfeld announced today that the president has made the following nomination:

Army Maj. Gen. John W. Holly, program director, Ground-Based Midcourse Defense Joint Program Office, Missile Defense Agency, Huntsville, Ala., to deputy director, Missile Defense Agency, Washington, D.C.

DEPARTMENT OF DEFENSE NEWS RELEASE (JUNE 16, 2004) FLAG OFFICER ANNOUNCEMENT

ecretary of Defense Donald R. Rumsfeld announced today that the president has made the following nomination:

Rear Admiral

Naval Reserve Rear Adm. (lower half) Thomas L. Andrews III has been nominated for appointment to the rank of rear admiral while serving as assistant to the deputy chief of staff for logistics, fleet supply and ordnance, Commander, U.S. Pacific Fleet, Pearl Harbor, Hawaii

DEPARTMENT OF DEFENSE NEWS RELEASE (JUNE 17, 2004) GENERAL OFFICER ASSIGNMENT

ecretary of Defense Donald H. Rumsfeld announced today that the president has nominated Air Force Lt. Gen. Duncan J. McNabb for re-appointment to the grade of lieutenant general with assignment as director for logistics, J-4, Joint Staff, Pentagon, Washington, D.C. McNabb is currently serving as

deputy chief of staff, plans and programs, Headquarters United States Air Force, Pentagon, Washington, D.C.

DEPARTMENT OF DEFENSE NEWS RELEASE (JUNE 24, 2004) FLAG OFFICER ASSIGNMENT

hief of Naval Operations Adm. Vern Clark announced the following flag officer assignment:

Navy Rear Adm. Alan B. Hicks is being assigned as deputy Surface Warfare for Combat Systems/Weapons, N76F, Office of the Chief of Naval Operations, Washington, D.C. Hicks is currently assigned as commander, Naval Surface Warfare Center/deputy commander for Warfare Systems Engineering, SEA-06, Naval Sea Systems Command, Washington, D.C.

DEPARTMENT OF DEFENSE NEWS RELEASE (JUNE 28, 2004) FLAG OFFICER ASSIGNMENTS

hief of Naval Operations Adm. Vern Clark announced the following flag officer assignments:

Navy Rear Adm. Donald K. Bullard is being assigned as deputy chief of staff for Logistics and Training, N4/7, U.S. Fleet Forces Command, Norfolk, Va. Bullard is currently assigned as commander, Carrier Group Six, Mayport, Fla

Navy Rear Adm. John S. Godlewski is being assigned as commander, Carrier Group Six, Mayport, Fla. Godlewski is currently assigned as deputy chief of staff for Warfare Requirements, Programs, Force Structure Analysis, N8, U.S. Pacific Fleet, Pearl Harbor, Hawaii.

DEPARTMENT OF DEFENSE NEWS RELEASE (JULY 1, 2004) FLAG OFFICER ASSIGNMENT

hief of Naval Operations Adm. Vern Clark announced the following flag officer assignment: Navy Rear Adm. Michael S. Roesner is being assigned as commander, Naval Inventory Control Point Philadelphia/Mechanicsburg, Pa. Roesner is currently assigned as deputy chief of staff for Logistics, Fleet Supply and Ordnance, U.S. Pacific Fleet, Pearl Harbor, Hawaii.

DCMA DIRECTOR RECEIVES SECOND STAR (JULY 6, 2004)

ir Force Brig. Gen. Darryl A. Scott, Defense Contract Management Agency (DCMA) director, was promoted to the rank of major general on July 6 at a ceremony held in the Sheraton Crystal City Hotel in Crystal City, Va.

Acquisition Logistics Excellence An Internet Listing Tailored to the Professional Acquisition Workforce

Surfing the Ne

Acquisition Community Connection (ACC)

http://acc.dau.mil

Policies, procedures, tools, references, publications, Web links, and lessons learned for risk management, contracting, system engineering, total ownership cost (TOC).

Acquisition Reform Network (AcqNet)

http://www.arnet.gov/

Virtual library; federal acquisition and procurement opportunities; best practices; electronic forums; business opportunities; acquisition training; excluded parties list.

Advanced Concept Technology Demonstrations (ACTDs)

http://www.acq.osd.mil/actd/

ACTD's accomplishments, articles, speeches, guidelines, and points of contact.

Aging Systems Sustainment and Enabling Technologies (ASSET)

http://catt.bus.okstate.edu/asset/index.html

A government-academic-industry partnership. Technologies and processes developed in the ASSET program increase the DoD supply base, reduce time and cost associated with parts procurement, and enhance military readiness.

Air Force (Acquisition)

http://www.safaq.hq.af.mil/

Policy; career development and training opportunities; reducing TOC; library; links.

Air Force Materiel Command (AFMC) Contracting Laboratory's FAR Site

http://farsite.hill.af.mil/

FAR search tool; Commerce Business Daily announcements (CBDNet); Federal Register; electronic forms library.

Army Acquisition Support Center

http://asc.army.mil

News; policy; Army AL&T Magazine; programs; career information; events; training opportunities.

Assistant Secretary of the Army (Acquisition, Logistics & Technology)

https://webportal.saalt.army.mil/

ACAT Listing; ASA(ALT) Bulletin; digital documents library; ASA(ALT) organization; links to other Army acquisition sites.

Association of Old Crows (AOC)

http://www.crows.org

Association news; conventions, conferences, courses; Journal of Electronic Defense.

Commerce Business Daily

http://cbdnet.gpo.gov

Access to current and back issues with search capabilities; business opportunities; interactive yellow pages.

Committee for Purchase from People Who are Blind or Severely Disabled http://www.iwod.gov

Information and guidance to federal customers on the requirements of the Javits-Wagner-O'Day (JWOD) Act.

Defense Acquisition University (DAU)

http://www.dau.mil

DAU Course Catalog; Defense AT&L magazine and Defense Acquisition Review journal; course schedule; policy documents; guidebooks; and training and education news for the Defense Acquisition Workforce.

DAU Alumni Association

http://www.dauaa.org

Acquisition tools and resources; government and related links; career opportunities; member forums.

DAU Distance Learning Courses

http://www.dau.mil/registrar/apply.asp Take DAU courses online at your desk, at home, at your convenience.

Defense Advanced Research Projects Agency (DARPA)

http://www.darpa.mil

News releases; current solicitations; "Doing Business with DARPA."

Defense Electronic Business Program Office (DEBPO)

http://www.acq.osd.mil/dpap/ebiz

Policy; newsletters; Central Contractor Registration (CCR); assistance centers; DoD EC partners.

Defense Information Systems Agency

http://www.disa.mil

Structure and mission of DISA; Defense Information System Network; Defense Message System; Global Command and Control System.

Defense Modeling and Simulation Office (DMSO)

http://www.dmso.mil

DoD Modeling and Simulation Master Plan; document library; events; services.

Defense Systems Management College (DSMC)

http://www.dau.mil

DSMC educational products and services; course schedules; job opportunities.

Defense Technical Information Center (DTIC)

http://www.dtic.mil/

DTIC's scientific and technical information network (STINET) is one of DoD's largest available repositories of scientific, research, and engineering information. Hosts over 100 DoD Web sites. Register for services

Deputy Director, Systems Engineering, USD(AT&L/IO/SE)

http://www.acq.osd.mil/io/se/index.htm

Systems engineering mission; Defense Acquisition Workforce Improvement Act information, training, and related sites; information on key areas of systems engineering responsibility.

Director, Defense Procurement and Acquisition Policy (DPAP)

http://www.acq.osd.mil/dpap

Procurement and acquisition policy news and events; reference library; DPAP organizational breakout; acquisition education and training policy and guidance.

DoD Defense Standardization Program

http://www.dsp.dla.mil

All about DoD standardization; key Points of Contact; FAQs; Military Specifications and Standards Reform; newsletters; training; nongovernment standards; links to related sites.

DoD Enterprise Software Initiative (ESI)

http://www.donimit.navy.mil/esi

Joint project to implement true software enterprise management process within DoD.

DoD Inspector General Publications http://www.dodig.ord.mil/pubs/index

http://www.dodig.osd.mil/pubs/index. html

Audit and evaluation reports; IG testimony; planned and ongoing audit projects of interest to the acquisition community.

DoD Office of Technology Transition

http://www.dtic.mil/ott/

Information about and links to OTT's programs.

Dual Use Science & Technology (DUS&T) Program

http://www.dtic.mil/dust

Fact sheet; project information, guidance, and success stories.

Earned Value Management

http://www.acg.osd.mil/pm

Implementation of Earned Value
Management; latest policy changes;
standards; international developments;
active noteboard.

Electronic Industries Alliance (EIA)

http://www.eia.org

Government relations department; includes links to issue councils; market research assistance.

Federal Acquisition Institute (FAI)

http://www.faionline.com

Virtual campus for learning opportunities; information access and performance support.

Federal Acquisition Jump Station

http://prod.nais.nasa.gov/pub/fed-proc/home.html

Procurement and acquisition servers by contracting activity; CBDNet; reference library.

Federal Aviation Administration (FAA)

http://www.asu.faa.gov

Online policy and guidance for all aspects of the acquisition process.

Federal Government Technology Transfer Links

http://dtica.dtic.mil/t2/orgt2.html

Manpower and Training Research Information System (MATRIS) project offers links to federal government tech transfer programs.

Federal R&D Project Summaries

http://www.osti.gov/fedrnd/about.html Portal to information on federal research

Portal to information on federal research projects; search databases at different agencies.

Federal Research in Progress (FEDRIP)

http://grc.ntis.gov/fedrip.htm

Information on federally funded projects in the physical sciences, engineering, and life sciences

Fedworld Information

http://www.fedworld.gov

Comprehensive central access point for searching, locating, ordering, and acquiring government and business information.

General Accounting Office (GAO)

http://www.gao.gov

GAO reports; policy and guidance; FAQs.

General Services Administration (GSA)

http://www.gsa.gov

Online shopping for commercial items to support government interests.

Government-Industry Data Exchange Program (GIDEP)

http://www.gidep.org/

Federally funded co-op of governmentindustry participants, providing electronic forum to exchange technical information essential to research, design, development, production, and operational phases of the life cycle of systems, facilities, and equipment.



Acquisition Logistics Excellence

An Internet Listing Tailored to the Professional Acquisition Workforce

<u>Surfing the Net</u>

GOV.Research_Center

http://grc.ntis.gov

U.S. Dept. of Commerce, National Technical Information Service (NTIS), and National Information Services Corporation (NISC) joint venture single-point access to government information.

Integrated Dual-Use Commercial Companies (IDCC)

http://www.idcc.org

Information for technology-rich commercial companies on doing business with the federal government.

International Society of Logistics

http://www.sole.org

Online desk references that link to logistics problem-solving advice; Certified Professional Logistician certification.

Joint Experimentation (JE) Program

http://www.jfcom.mil/about/experiment.html

The U.S. Joint Forces Command (USJFCOM)'s JE campaign plans support improvements in doctrine, interoperability, and integration for more effective use of military forces.

Joint Interoperability Test Command (JITC)

http://jitc.fhu.disa.mil

Policies and procedures for interoperability certification; lessons learned; support link.

Joint Spectrum Center (JSC)

http://www.jsc.mil

Provides operational spectrum management support to the Joint Staff and COCOMs and conducts R&D into spectrum-efficient technologies.

Library of Congress

http://www.loc.gov

Research services; Congress at Work; Copyright Office; FAQs.

MANPRINT (Manpower and Personnel Integration)

http://www.manprint.army.mil

Points of contact for program managers; relevant regulations; policy letters from the Army Acquisition Executive; briefings on the MANPRINT program.

National Aeronautics and Space Administration (NASA)'s

Commercial Technology Office (CTO)

http://technology.grc.nasa.gov Promotes competitiveness of U.S. industry through commercial use of NASA technologies and expertise.

National Contract Management Association (NCMA)

http://www.ncmahq.org

"What's New in Contracting?"; educational products catalog; career center.

National Defense Industrial Association (NDIA)

http://www.ndia.org

Association news; events; government policy; National Defense magazine.

National Geospatial-Intelligence Agency

http://www.nima.mil

Imagery; maps and geodata; Freedom of Information Act resources; publications.

National Institute of Standards and Technology (NIST)

http://www.nist.gov

Information about NIST technology, measurements, and standards programs, products, and services.

National Technical Information Service (NTIS)

http://www.ntis.gov/

Online service for purchasing technical reports, computer products, videotapes, audiocassettes.

Naval Sea Systems Command

http://www.navsea.navy.mil

Total Ownership Cost (TOC); documentation and policy; reduction plan; implementation timeline; TOC reporting templates; FAQs.

Navy Acquisition and Business Management

http://www.abm.rda.hq.navy.mil

Policy documents; training opportunities; guides on risk management, acquisition environmental issues, past performance, and more; news and assistance for the Standardized Procurement System (SPS) community; notices of upcoming events.

Navy Acquisition, Research and Development Information Center

http://www.onr.navy.mil/sci_tech

News and announcements; acronyms; publications and regulations; technical reports; how to do business with the Navy.

Navy Best Manufacturing Practices Center of Excellence

http://www.bmpcoe.org

National resource to identify and share best manufacturing and business practices in use throughout industry, government, academia.

Naval Air Systems Command (NAVAIR)

http://www.navair.navy.mil

Provides advanced warfare technology through the efforts of a seamless, integrated, worldwide network of aviation technology experts.

Office of Force Transformation

http://www.oft.osd.mil

News on transformation policies, programs, and projects throughout the DoD and the Services.

Open Systems Joint Task Force

http://www.acg.osd.mil/ositf

Open Systems education and training opportunities; studies and assessments; projects, initiatives and plans; reference library.

Parts Standardization and Management Committee (PSMC)

http://www.dscc.dla.mil/psmc

Collaborative effort between government and industry for parts management and standardization through commonality of parts and processes.

Project Management Institute

http://www.pmi.org

Program management publications; information resources; professional practices; career certification.

Small Business Administration (SBA)

http://www.sbaonline.sba.gov

Communications network for small businesses.

Small Business Innovation Research (SBIR) Program and Small Business Technology Transfer (SBTT) Program

http://www.acq.osd.mil/sadbu

Program and process information; current solicitations; Help Desk information.

Software Program Managers Network

http://www.spmn.com

Site supports project managers, software practitioners, and government contractors.

Contains publications on highly effective software development best practices.

Space and Naval Warfare Systems Command (SPAWAR)

https://e-commerce.spawar.navy.mil

SPAWAR business opportunities; acquisition news; solicitations; small business information.

Under Secretary of Defense (Acquisition, Technology and Logistics) (USD[AT&L])

http://www.acq.osd.mil/

USD(AT&L) documents; streaming videos; links to many other valuable sites.

USD(AT&L) Knowledge Sharing System (formerly Defense Acquisition Deskbook)

http://akss.dau.mil

Automated acquisition reference tool covering mandatory and discretionary practices.

U.S. Coast Guard

http://www.uscg.mil

News and current events; services; points of contact; FAQs.

U.S. Department of Transportation MARITIME Administration

http://www.marad.dot.gov/

Information and guidance on the requirements for shipping cargo on U.S. flag vessels.

All links current at press time. To add a non-commercial defense acquisition/acquisition and logistics excellence-related Web site to this list, please fax your request to Judith Greig, (703) 805-2917. DAU encourages the reciprocal linking of its Home Page to other interested agencies. Contact: webmaster@dau.mil.

Defense AT&L Writer's Guidelines in Brief

Purpose

The purpose of *Defense AT&L* magazine is to instruct members of the DoD acquisition, technology & logistics (AT&L) workforce and defense industry on policies, trends, legislation, senior leadership changes, events, and current thinking affecting program management and defense systems acquisition, and to disseminate other information pertinent to the professional development and education of the DoD Acquisition Workforce.

Subject Matter

We do print feature stories that include real people and events. Stories that appeal to our readers—who are senior military personnel, civilians, and defense industry professionals in the program management/acquisition business—are those taken from real-world experiences vs. pages of researched information. We don't print academic papers, fact sheets, technical papers, or white papers. We don't use endnotes or references in our articles. Manuscripts meeting these criteria are more suited for DAU's journal, Defense Acquisition Review.

Defense AT&L reserves the right to edit manuscripts for clarity, style, and length. Edited copy is cleared with the author before publication.

Length

Articles should be 2,000 - 3,000 words or about 10 double-spaced pages, each page having a 1-inch border on all sides. For articles that are significantly longer, please query first by sending an abstract.

Include a short biographical sketch of the author(s)—about 25 words—including current position and educational background.

Style

Good writing sounds like comfortable conversation. Write naturally and avoid stiltedness. Except for a rare change of pace, most sentences should be 25 words or less, and paragraphs should be six sentences. Avoid excessive use of capital letters. Be sure to define all acronyms. Consult "Tips for Authors" at http://www.dau.mil/pubs/pm/articles.asp.

Presentation

Manuscripts should be submitted as Microsoft Word files. Please use Times Roman or Courier 11 or 12 point. Double space your manuscript and do not use columns or any formatting other than bold, italics, and bullets. Do not embed or import graphics into the document file; they must be sent as separate files (see next section).

Graphics

We use figures, charts, and photographs (black and white or color). Photocopies of photographs are not acceptable. Include brief, numbered captions keyed to the figures and

photographs. Include the source of the photograph. We publish no photographs or graphics from outside the DoD without written permission from the copyright owner. We do not guarantee the return of original photographs.

Digital files may be sent as e-mail attachments or mailed on zip disk(s) or CD. Each figure or chart must be saved as a separate file in the original software format in which it was created and must meet the following publication standards: color and greyscale (if possible); JPEG or TIF files sized to print no smaller than 3 x 5 inches at a minimum resolution of 300 pixels per inch; PowerPoint slides; EPS files generated from Illustrator (preferred) or Corel Draw. For other formats, provide program format as well as EPS file). Questions on graphics? Call (703) 805-4287, DSN 655-4287 or e-mail vaworkorders@dau.mil. Subject line: Defense AT&L graphics.

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Authors must certify that the article is a "Work of the U.S. Government." Go to http://www.dau.mil/pubs/pm/articles.asp. Scroll to the bottom of the screen and click on "Copyright Forms." Print, fill out in full, sign, and date the form. Submit the form with your article or fax it to (703) 805-2917, ATTN: Rosemary Kendricks. Your article will not be reviewed until we receive the copyright form. Articles printed in Defense AT&L are in the public domain and posted to the DAU Web site. In keeping with DAU's policy of widest dissemination of its published products, no copyrighted articles are accepted.

Submission Dates

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Issue	Author's Deadline	
January-February	1 October	
March-April	l December	
May-June	l February	
July-August	l April	
September-October	l June	
November-December	1 August	

If the magazine fills before the author deadline, submissions are considered for the following issue.

Submission Procedures

Submit articles by e-mail to judith.greig@dau.mil or on disk to: DAU Press, ATTN: Judith Greig, 9820 Belvoir Rd., Suite 3, Fort Belvoir VA 22060-5565. Submissions must include the author's name, mailing address, office phone number (DSN and commercial), e-mail address, and fax number.

Receipt of your submission will be acknowledged in five working days. You will be notified of our publication decision in two to three weeks.

